

## TOLKIN System End User Guide



## TOLKIN System End User Guide

### Information Management and Analytical Bioinformatics

## *All Modules*

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**TOLKIN System End User Guide**

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## TOLKIN System End User Guide

### About This End User Guide

This End User Guide offers guidance on the various features and functions within each of the TOLKIN modules. This guide is intended to aid in becoming a more confident and skilled user of the system.

For users to continuously improve and progress throughout the system, Help topics are also available online within the TOLKIN web application and can be accessed through the Help menu.

It's important to note that Tolkin is under active development and this document serves as a guide to the features that were available at the time of this writing. This document is also under active development.

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## TOLKIN System End User Guide

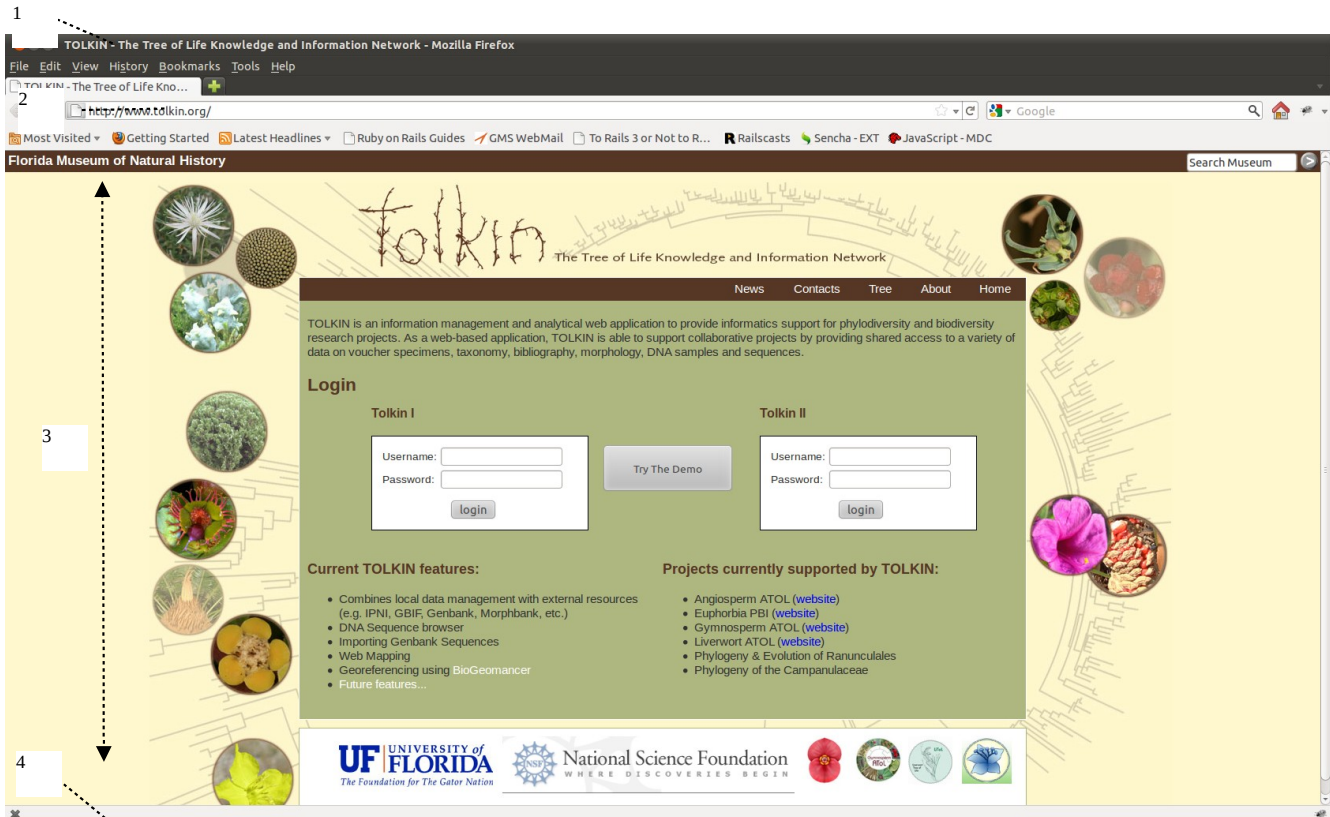
### TOLKIN Introduction

TOLKIN is an information management and analytical web application to provide informatics support for phylodiversity and biodiversity research projects. As a web-based application, TOLKIN is able to support collaborative projects by providing shared access to a variety of data on voucher specimens, taxonomy, bibliography, morphology, DNA samples and sequences.

## TOLKIN System End User Guide

### Web Browser Interface

The browser has control over the appearance and functionality of the browser window use to launch the system. The following diagram explains the elements of the web browser interface.



1. **Title bar** – displays the web pages title
2. **Address bar** – displays the Uniform Resource Locator (URL) of the Internet File (protocol, server, path, and filename).
3. **System Interface** – appearance specific to the application
4. **Message bar** – displays any events occurring on the browser page, such as Downloading picture...also, if the mouse pointer is moved over a link, the link's URL is displayed

## TOLKIN System End User Guide

### TOLKIN Projects Page

The TOLKIN Projects Page is a portal that displays the projects within the system that are in-progress. This page displays upon login.

Keywords and Application Definitions






The **Navigation Menu** displays all the modules that are a part of the TOLKIN system. All the modules have sub-menus delineating the different components of each module.

The **Projects and Login, User/Session** frame gives the option to navigate/select through projects, gives user and logout information.

The **Interact Mode Switch** frame provides the ability to interchange the user interaction with the system. This is based on user permissions and roles.

The **Projects** pane provides the links for the different areas, called projects, that the user has permission to browse or to edit based on permission and roles.

The screenshot shows the TOLKIN web interface. At the top left is the 'Tolkin' logo. Below it is a navigation menu with tabs: Home, Taxonomy, Morphology, Molecular, Chromosome, Collections, Library, Workflows, Tags, and Admin. To the right of the navigation menu is a 'Project' dropdown menu currently set to 'Basal Fishes', with a 'Logged in as nsantiago logout' link below it. Further right is a 'Powered by Tolkin' section with 'Browse' and 'Edit' buttons. The main content area is titled 'Project List:' and contains a table with two columns: 'Name' and 'Website'.

Name	Website
Tolkin	
 Angiosperm ATOL	<a href="http://www.flmnh.ufl.edu/angiospermATOL/">http://www.flmnh.ufl.edu/angiospermATOL/</a>
 Liverwort ATOL	<a href="http://www.biology.duke.edu/bryology/LiToL/">http://www.biology.duke.edu/bryology/LiToL/</a>
 Euphorbia PBI	
 Gymnosperm ATOL	
Phylogeny & Evolution of Ranunculales	
Deep Green	
Basal Fishes	
 Phylogeny of the Campanulaceae	

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**TOLKIN System End User Guide**

## Portal Page Notes

The initial page loaded following login, a project must be chosen from the list.

After a project is chosen the application Home Page is displayed with Taxonomy information associated with the chosen project. Based on the user permissions profile, different module tabs will be displayed at the top of the frame. The sections expand into sub-tabs upon mouse-overs displaying the features associated with each of the modules.

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## TOLKIN System End User Guide

### ***Module Introduction: Taxonomy***

The Taxonomy manages taxonomic information. It allows the user to manage the species names as an informatics tool. Taxonomy being the science that describes organisms.

#### **Definitions:**

**Taxon** – Any group of organisms, at any level of the hierarchical representation

**Taxon Tree** – Hierarchical representation of the relationship between species via their names

**Otu** – Operational Taxonomic Unit, an informal group of organisms for the purpose of study. Most times the names of Otus are arbitrary for ease of work within an organization.

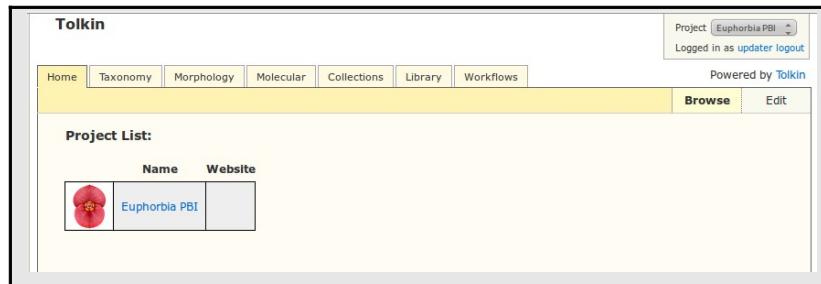


## TOLKIN System End User Guide



### I. Logging into Tolkin

1. Launch your browser (Firefox, Chrome, Safari, etc.) | Go to <http://app.tolkin.org/login> | enter **Username** and **Password** | click on the **login** button



2. The Tolkin Projects page is displayed | Select the adequate project (i.e. Euphorbia PBI)

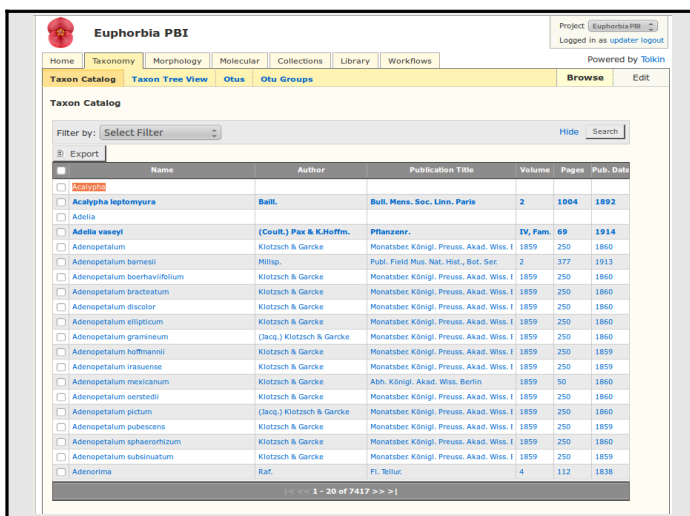


**\*\*Note\*\*** After the project is selected, the Taxonomy count in the Launch page is displayed and Tab menus are made available



If the mouse hovers on the Taxonomy tab, a sub menu appears displaying the options.

3. Click the **Taxonomy** tab or click the **Taxon Tree Icon**



**\*\*Note\*\*** To change the project in which work is being performed, you can also select from the top User/Session Frame Project drop-down menu.

4. Click the **Home** tab | **Logout** of the application 

## TOLKIN System End User Guide



## II. Navigation and Search Filters

1. After the user is logged into the TOLKIN application | From the Projects Page select **Euphorbia PBI**
2. From the **Home/Taxonomy Details** page click the **Taxonomy** tab



**\*\*Note\*\*** Whenever the user clicks the Taxonomy tab, the frame will display the Taxon Catalog by default



**::Tip::** In Tolkin the pages that display the list of items is called Index Pages (i.e. Taxon Index Page)



**\*\*Note\*\*** The bottom of the catalog contains the pagination bar with the buttons to browse through all the records

3. To search for a specific Taxon, click/expand the **Filter by:** drop-down menu | Select criteria (i.e. Subgenus) | Fill out the information desired | Click the button
4. Click the **Edit** button in the Interact Mode Switch (top right-hand corner) | The
 
 buttons
5. To show the Detail Page of a record click on the desired Taxon



**\*\*Note\*\*** When a Probe is newly created the Details Page will look empty and ready for information and files to be added/attached.



**::Tip::** To make sure the desired Taxon is clicked, when the mouse is hovered over it the

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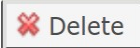
## TOLKIN System End User Guide

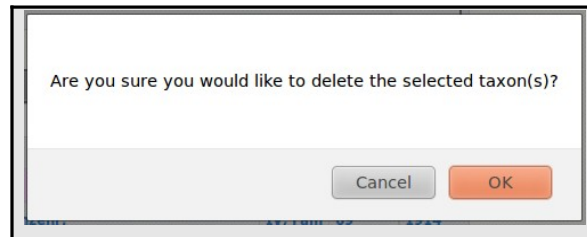
row should change color to yellow.


6. To create, edit, delete, export the meta-data associated of a Taxon, make sure that Edit is selected in the Interact Mode Switch (top right-hand corner)



**\*\*Note\*\*** Only users that have the appropriate matrix of roles and permissions associated with them will be able to create/modify information.

7. To reach the Index Catalog, click the Taxonomy sub-menu option to return to the Probes Index page or “X” out the page, on the top right of the window
8. To delete a Taxon, select the check-box | Click the  button



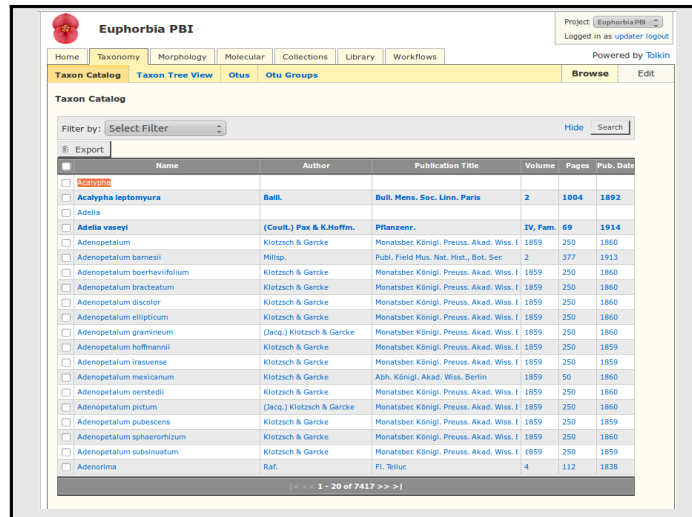
9. When the confirmation alert box appears click **OK** 

## TOLKIN System End User Guide



### III. Taxon Catalog Navigation

- After the user is logged into the TOLKIN application | The **Euphorbia PBI** project is selected | when **Taxon Catalog** is being displayed

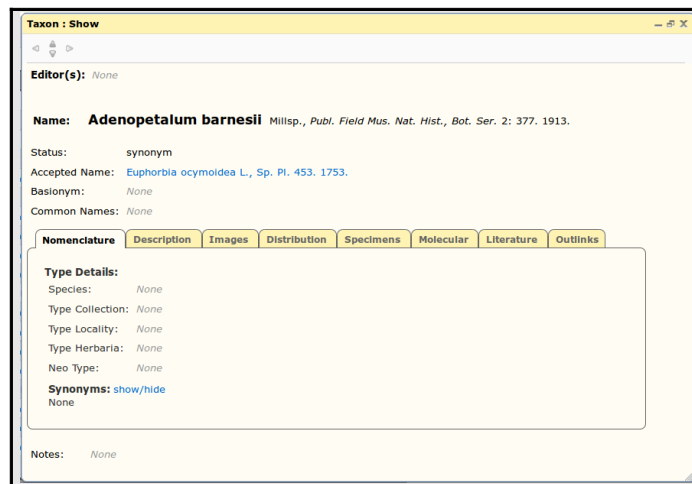


Name	Author	Publication Title	Volume	Pages	Pub. Date
<input type="checkbox"/> <i>Adalypha</i>					
<input type="checkbox"/> <i>Adalypha leptomyra</i>	Baill.	Bull. Mens. Soc. Linn. Paris	2	1004	1892
<input type="checkbox"/> <i>Adella</i>					
<input type="checkbox"/> <i>Adella vaseyi</i>	(Coul.) Pax & K.Hoffm.	Pflanzendr.	IV, Pan.	69	1914
<input type="checkbox"/> <i>Adenopetalum</i>	Klotzsch & Garcke	Monatsber. Königl. Preuss. Akad. Wiss. I	1859	250	1860
<input type="checkbox"/> <i>Adenopetalum barnesii</i>	Millsp.	Publ. Field Mus. Nat. Hist., Bot. Ser.	2	377	1913
<input type="checkbox"/> <i>Adenopetalum boerhaviifolium</i>	Klotzsch & Garcke	Monatsber. Königl. Preuss. Akad. Wiss. I	1859	250	1860
<input type="checkbox"/> <i>Adenopetalum bracteatum</i>	Klotzsch & Garcke	Monatsber. Königl. Preuss. Akad. Wiss. I	1859	250	1860
<input type="checkbox"/> <i>Adenopetalum discolor</i>	Klotzsch & Garcke	Monatsber. Königl. Preuss. Akad. Wiss. I	1859	250	1860
<input type="checkbox"/> <i>Adenopetalum ellipticum</i>	Klotzsch & Garcke	Monatsber. Königl. Preuss. Akad. Wiss. I	1859	250	1860
<input type="checkbox"/> <i>Adenopetalum gramineum</i>	(Jacq.) Klotzsch & Garcke	Monatsber. Königl. Preuss. Akad. Wiss. I	1859	250	1860
<input type="checkbox"/> <i>Adenopetalum hoffmannii</i>	Klotzsch & Garcke	Monatsber. Königl. Preuss. Akad. Wiss. I	1859	250	1859
<input type="checkbox"/> <i>Adenopetalum irasense</i>	Klotzsch & Garcke	Monatsber. Königl. Preuss. Akad. Wiss. I	1859	250	1859
<input type="checkbox"/> <i>Adenopetalum mexicanum</i>	Klotzsch & Garcke	Abh. Königl. Akad. Wiss. Berlin	1859	50	1860
<input type="checkbox"/> <i>Adenopetalum oerstedii</i>	Klotzsch & Garcke	Monatsber. Königl. Preuss. Akad. Wiss. I	1859	250	1860
<input type="checkbox"/> <i>Adenopetalum pictum</i>	(Jacq.) Klotzsch & Garcke	Monatsber. Königl. Preuss. Akad. Wiss. I	1859	250	1860
<input type="checkbox"/> <i>Adenopetalum pubescens</i>	Klotzsch & Garcke	Monatsber. Königl. Preuss. Akad. Wiss. I	1859	250	1859
<input type="checkbox"/> <i>Adenopetalum sphaeranthum</i>	Klotzsch & Garcke	Monatsber. Königl. Preuss. Akad. Wiss. I	1859	250	1860
<input type="checkbox"/> <i>Adenopetalum subsinuatum</i>	Klotzsch & Garcke	Monatsber. Königl. Preuss. Akad. Wiss. I	1859	250	1859
<input type="checkbox"/> <i>Adenorhiza</i>	Raf.	Fl. 'Willd.	4	112	1838

- From the **Taxonomy Catalog** page click the record to be viewed/inspected



**\*\*Note\*\*** Whenever the user clicks the record to be viewed, a frame will pop-up displaying the Taxon



**Taxon : Show**

Editor(s): None

**Name:** *Adenopetalum barnesii* Millsp., Publ. Field Mus. Nat. Hist., Bot. Ser. 2: 377. 1913.

Status: synonym

Accepted Name: *Euphorbia ocymolidea* L., Sp. Pl. 453. 1753.

Basionym: None

Common Names: None

**Nomenclature** | Description | Images | Distribution | Specimens | Molecular | Literature | Outlinks

**Type Details:**

Species: None

Type Collection: None

Type Locality: None

Type Herbaria: None

Neo Type: None

Synonyms: show/hide

None

Notes: None



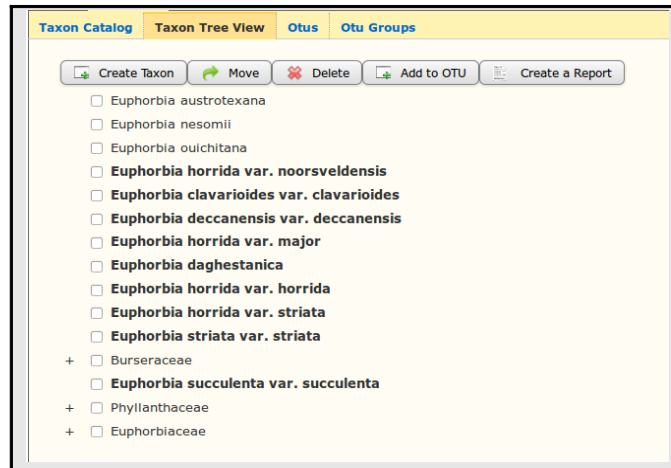
**::Tip::** All the information regarding a Taxon can be found by clicking on the tabs within this window: Nomenclature, Distribution, Specimens, etc.

## TOLKIN System End User Guide



### IV. Taxon Tree View Navigation

1. After the user is logged into the TOLKIN application | The **Euphorbia PBI** project is selected | when **Taxon Tree View** is being displayed



**Tip:** In the **Taxonomy Tree View** page Instructions can be found on the top right-hand corner of the frame

#### Instructions:

+ : Expand View.  
 - : Collapse View.

Press key A and click a taxon to select/unselect a taxon.

Press keys A + R and click a taxon to select/unselect a taxon and its children recursively.



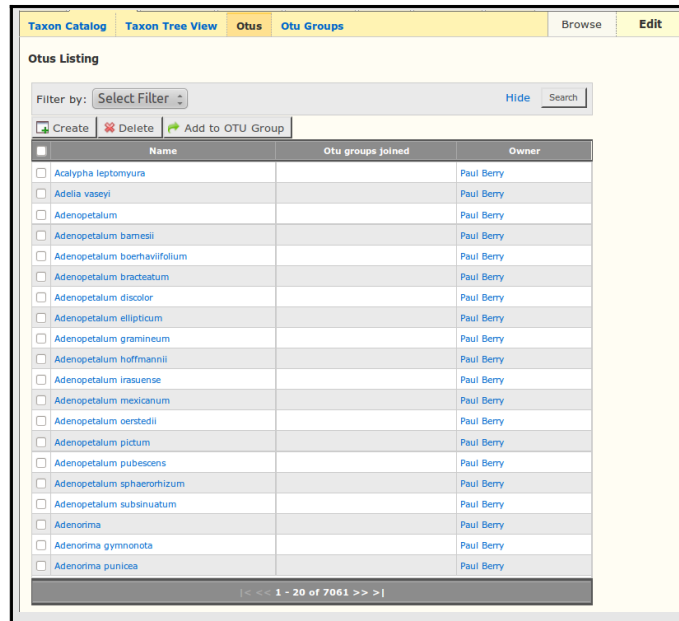
**Note** Whenever the user clicks the record to be viewed a frame will pop-up window will display the Taxon

## TOLKIN System End User Guide



### IV. Otus Navigation

1. After the user is logged into the TOLKIN application | The **Euphorbia PBI** project is selected | when **Otus** page is being displayed in Catalog form



**Otus Listing**

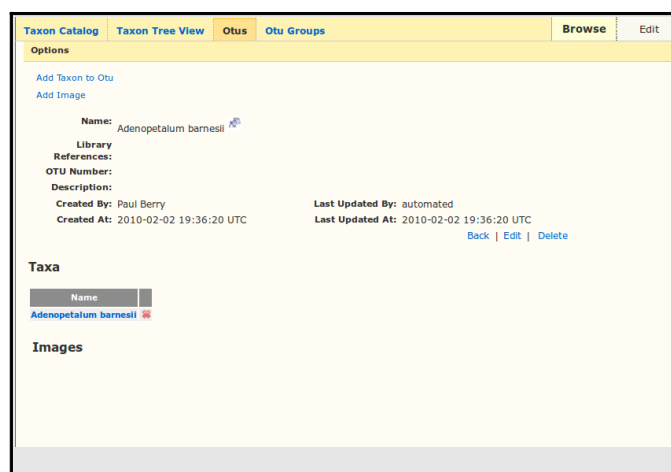
Filter by: Select Filter Hide Search

Create Delete Add to OTU Group

	Name	Otu groups joined	Owner
<input type="checkbox"/>	Acalypha leptomyura		Paul Berry
<input type="checkbox"/>	Adelia vaseyi		Paul Berry
<input type="checkbox"/>	Adenopetalum		Paul Berry
<input type="checkbox"/>	Adenopetalum bamesii		Paul Berry
<input type="checkbox"/>	Adenopetalum boerhaviifolium		Paul Berry
<input type="checkbox"/>	Adenopetalum bracteatum		Paul Berry
<input type="checkbox"/>	Adenopetalum discolor		Paul Berry
<input type="checkbox"/>	Adenopetalum ellipticum		Paul Berry
<input type="checkbox"/>	Adenopetalum gramineum		Paul Berry
<input type="checkbox"/>	Adenopetalum hoffmannii		Paul Berry
<input type="checkbox"/>	Adenopetalum irasense		Paul Berry
<input type="checkbox"/>	Adenopetalum mexicanum		Paul Berry
<input type="checkbox"/>	Adenopetalum oerstedii		Paul Berry
<input type="checkbox"/>	Adenopetalum pictum		Paul Berry
<input type="checkbox"/>	Adenopetalum pubescens		Paul Berry
<input type="checkbox"/>	Adenopetalum sphaerorrhizum		Paul Berry
<input type="checkbox"/>	Adenopetalum subsinuatum		Paul Berry
<input type="checkbox"/>	Adenorima		Paul Berry
<input type="checkbox"/>	Adenorima gymnonota		Paul Berry
<input type="checkbox"/>	Adenorima punicea		Paul Berry

[< << 1 - 20 of 7061 >> >]

2. To add Otu(s) to a group, select the records and click the Add to OTU Group button | Fill out the information desired | Select or Create group and click the Add button
3. To display the details click on a particular Otu



**Options**

[Add Taxon to Otu](#)  
[Add Image](#)

**Name:** Adenopetalum bamesii

**Library:**

**References:**

**OTU Number:**

**Description:**

**Created By:** Paul Berry  
**Created At:** 2010-02-02 19:36:20 UTC

**Last Updated By:** automated  
**Last Updated At:** 2010-02-02 19:36:20 UTC

[Back](#) | [Edit](#) | [Delete](#)

**Taxa**

Name
Adenopetalum bamesii

**Images**



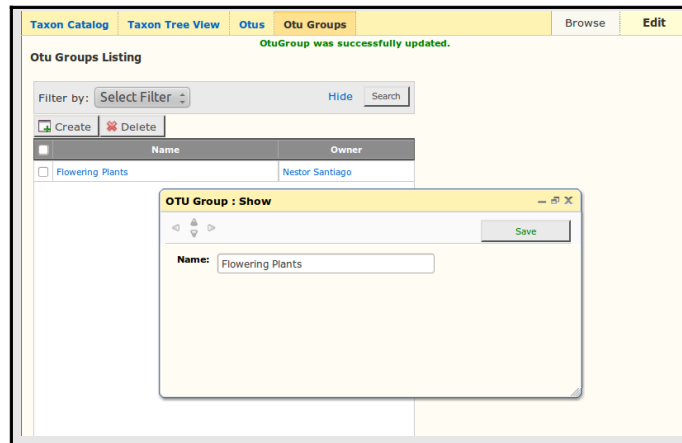
**\*\*Note\*\*** To add Taxons and/or Images to the Otu click the respective links in the top left-hand corner of the screen.

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### V. Otu Groups

1. After the user is logged into the TOLKIN application | The **Euphorbia PBI** project is selected | when **Otu Groups** page is being displayed in Catalog form | click on a particular Otu Group to edit the name



**\*\*Note\*\*** *Otu Groups can be added through the Otus section as well.*

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**TOLKIN System End User Guide*****Module Introduction: Collections***

The Tolkin end user will need to enter, process and retrieve research information/data regarding the collection of specimens for further study. Information about the specimen helps to define the species that it pertains to.

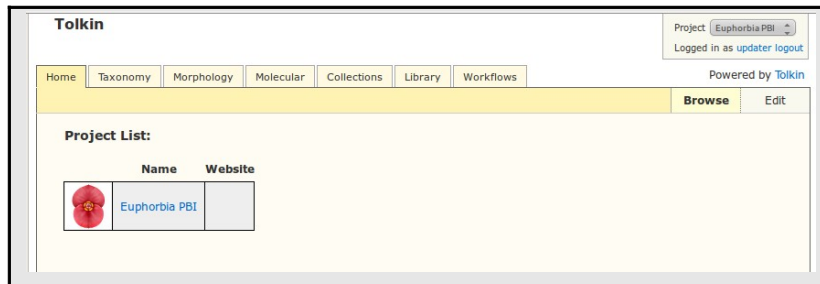


## TOLKIN System End User Guide



### I. Logging into Tolkin

- Launch your browser (Firefox, Chrome, Safari, etc.) | Go to **10.243.11.94:3000/login** | enter **Username** and **Password** | click on the **login** button



- The Tolkin Projects page is displayed | Select the adequate project (i.e. Gymnosperm ATOL)



**\*\*Note\*\*** After the project is selected, the Taxonomy count in the Launch page is displayed and Tab menus are made available



If the mouse hovers on the Taxonomy tab a sub menu appears displaying the options.

- Click the **Collections** tab or click the **Taxon Tree Icon** to display the Taxon Catalog

Collector	Collection Number	Taxon	Country
Lianming Gao	GLM07-362	Cephalotaxus mannii Hook.f.	
S. Ickert-Bond	1105	Ephedra americana Humb. & Bonpl. ex Willd.	Ecuador
S. Ickert-Bond	900	Ephedra antioquiensis S. Watson	USA
S. Ickert-Bond	1136	Ephedra aspera Engelm. ex S. Watson	USA
S. Ickert-Bond	1252	Ephedra boeckii F. A. Roig	Argentina
S. Ickert-Bond	968	Ephedra californica S. Watson	USA
S. Ickert-Bond	1240	Ephedra chilensis Miers	Chile
Raul Puente-Martin	1901	Ephedra compacta Rose	Mexico
S. Ickert-Bond	952	Ephedra coryi E. L. Reed (x)	USA
S. Ickert-Bond	1006	Ephedra cutleri Peebles	USA
H. Freitag	30144	Ephedra distachya L. (x)	Syria
H. Freitag	s.n.	Ephedra equisetina Bunge	Kasachstan
S. Ickert-Bond	513	Ephedra fasciculata A. Nelson	USA
H. Freitag	19801	Ephedra foeminea Forsk.	Greece
S. Ickert-Bond	1247	Ephedra fruticulata Miers	Chile
Miehe	4717	Ephedra gerardiana Wall.	Pakistan
S. Ickert-Bond	1201	Ephedra gracilis Phil.	Chile
Assadi & Sardabi	41781	Ephedra laristanica Assadi	Iran
H. Freitag	28780	Ephedra major Host	Turkey
Dean Kelch	DGK 99.039	Podocarpus elongata (Ait.) L'Hec. ex Pers., Synopsis Plantarum	RSA



**\*\*Note\*\*** To change the project in which work is being performed, you can also select from the top User/Session Frame Project drop-down menu.

- Click the Home tab | Logout of the application 

## TOLKIN System End User Guide



### II. Creating a Collection

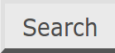

10. Launch your browser (Firefox, Chrome, Safari, etc.) | Go to **10.243.11.94:3000/login** | enter **Username** and **Password** | click on the **Login** button
11. From the Projects Page select **Gymnosperm ATOL**
12. From the **Home/Taxonomy Details** page click the **Collections** tab

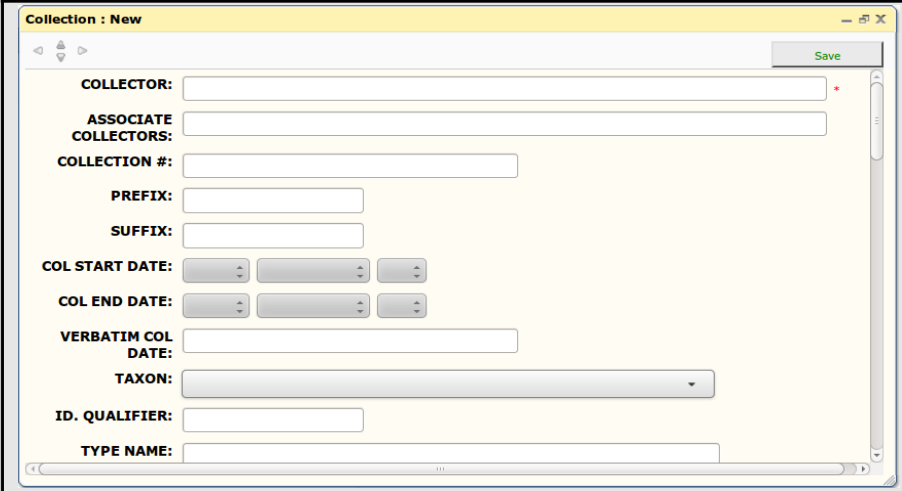


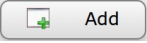
**\*\*Note\*\*** Whenever the user clicks the Collections tab, the frame will display the catalog by default



**::Tip::** In Tolkin the pages that display the list of items is called Index Pages (i.e. Collections Index Page)

13. To search for a specific Collection, click/expand the **Filter by:** drop-down menu | Select criteria (i.e. Value) | Fill out the information desired | Click the  button
14. Click the **Edit** button in the Interact Mode Switch (top right-hand corner) | In the Collections catalog click the  button



15. Enter the **Collector Name** | Enter as much information as needed/provided
16. To enter **Annotations**, scroll to the respective section | Enter Taxon, Determiner, etc. | Click the  button




**\*\*Note\*\*** Red asterisks (\*) by a field means that this field is required

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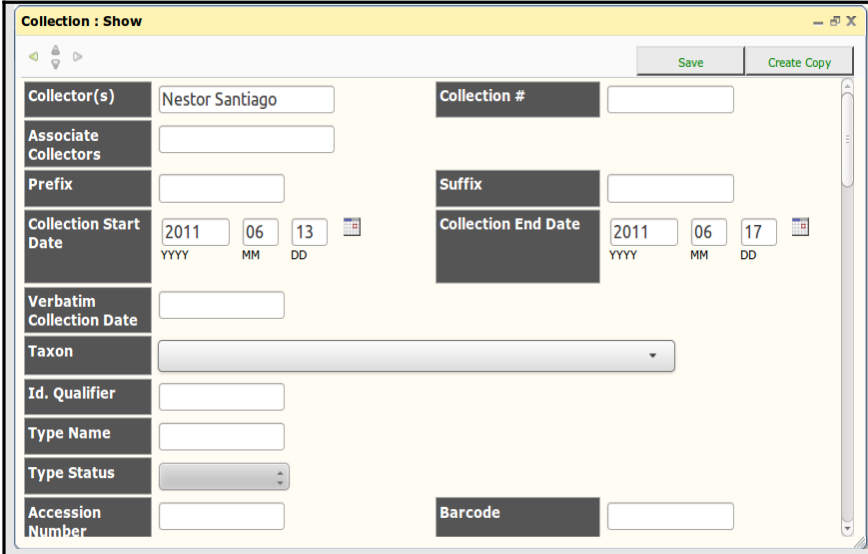


**\*\*Note\*\*** After adding Annotations, the catalog under the form is populated with the information provided

17. To remove Annotations, select the record | Click the  button

18. Click the  button

19. After saving the information the Detail Page of the Collection is displayed




**\*\*Note\*\*** When a Collection is newly created the Details Page will have the open fields for information to be updated.



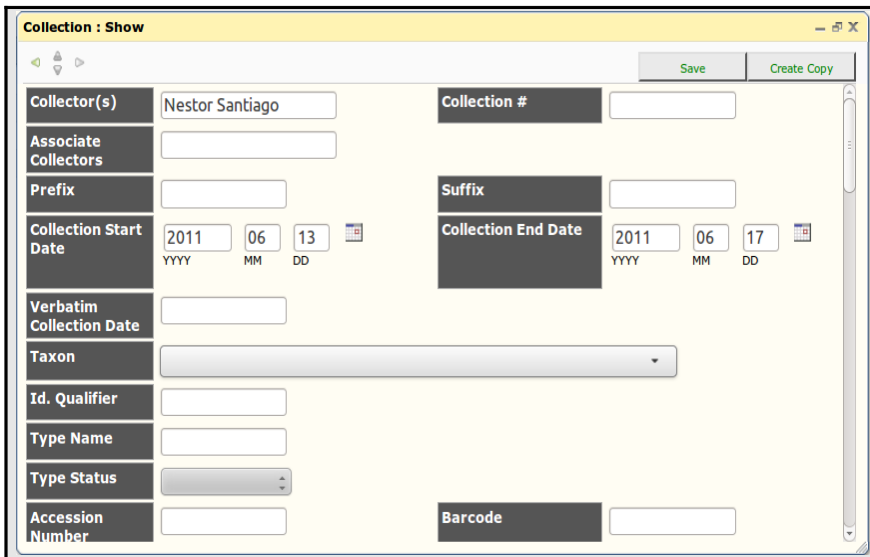
**::Tip::** To make sure the desired Collection is clicked, when the mouse is hovered over it the row should change color to yellow.

## TOLKIN System End User Guide



### III. Editing a Collection

3. Launch your browser (Firefox, Chrome, Safari, etc.) | Go to **10.243.11.94:3000/login** | enter **Username** and **Password** | click on the **Login** button
4. From the Projects Page select **Gymnosperm ATOL**
5. With the mouse, hover over the **Collections** tab
6. Click the **Edit** button in the Interact Mode Switch (top right-hand corner) | Hover over the Collection required to be edited/updated and click



**\*\*Note\*\*** When clicked the Collection will be displayed in a frame window

7. Enter the the information required | click the **Save** button
8. For ease of use, to copy the information already entered to another new record click the **Create Copy** button



**\*\*Note\*\*** When a Collection is edited/updated the frame window will remain open until it is closed.

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## TOLKIN System End User Guide


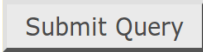



### IV. Deleting a Collection

2. To Delete a Collection, go to the **Collections** Index Page by clicking the Collections menu tab
3. Select the check-box for a Collection | Click the  Delete button
4. When the confirmation alert box appears click **OK** 



### V. Exporting a Collection

4. To Delete a a Collection, go to the **Collections** Index Page by clicking the Collections menu tab
5. Select the check-box for a Collection | Click the  Export button
6. Select the parameters required to be exported from the dialog box | Click the  Submit Query button
7. Choose the appropriate options in the browser dialog box 

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## TOLKIN System End User Guide

### ***Module Introduction: Library***

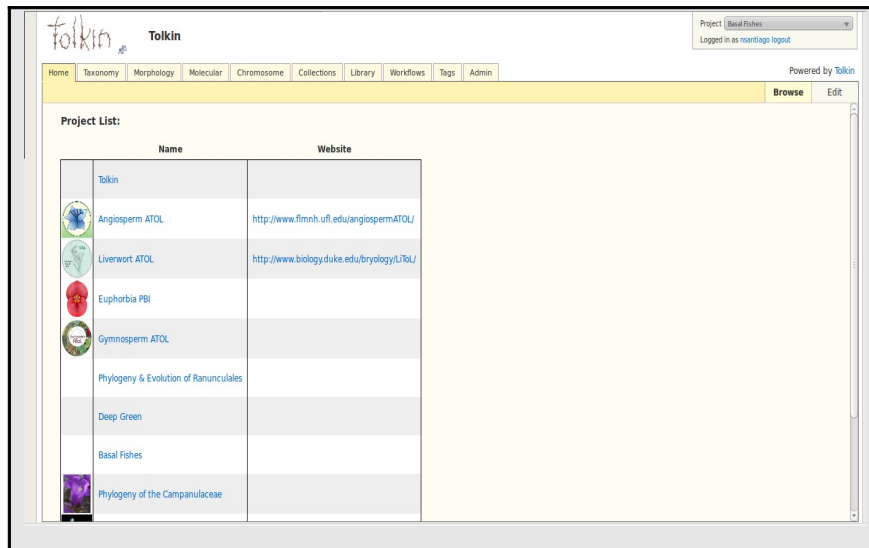
The Library provides research information/data regarding Tolkin database. It allows the user to find literatures related to the species.

## TOLKIN System End User Guide



### I. Logging into Tolkin

9. Launch your browser (Firefox, Chrome, Safari, etc.) | Go to **10.243.11.94:3000/login** | enter **Username** and **Password** | click on the **login** button



10. The Tolkin Projects page is displayed | Select the adequate project (i.e. Euphorbia PBI)



**\*\*Note\*\*** After the project is selected, the Taxonomy information is displayed and Tab menus are made available

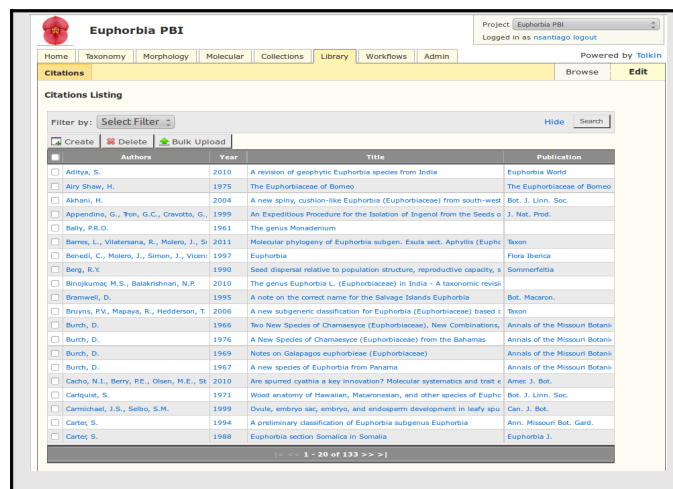


If the mouse hovers the Library tab, a sub menu appears displaying the options.

11. Click the **Library** tab



**\*\*Note\*\*** To change the project in which work is being performed, you can also select from the top User/Session Frame Project drop-down menu.



12. Click the **Home** tab | **Logout** of the application 

## TOLKIN System End User Guide



### II. Creating a Citation

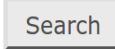
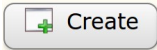
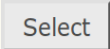
20. Launch your browser (Firefox, Chrome, Safari, etc.) | Go to **10.243.11.94:3000/login** | enter **Username** and **Password** | click on the **Login** button
21. From the Projects Page select **Euphorbia PBI**
22. From the **Home/Taxonomy Details** page | Click the **Library** tab



**\*\*Note\*\*** Whenever the user clicks the Library tab, the frame will display the Citations by default





**::Tip::** In Tolkien the pages that display the list of items are called Index Pages (i.e. Citations Index Page)

23. To search for a specific Citation, click/expand the **Filter by:** drop-down menu | Select criteria (i.e. Authors) | Enter information | Click the  button
24. Click the **Edit** button in the Interact Mode Switch (top right-hand corner) | In the Citations catalog click the  button
25. Select the Citation Type from the drop-down menu (i.e. Journal) | click the  button

26. Enter the all the information required | Select the Author(s), see *Appendix A* for instructions | Select a **Journal**, see appendix for instructions
27. Click the **Browse** button to attach a file to the citation



## TOLKIN System End User Guide

28. Click the  button 

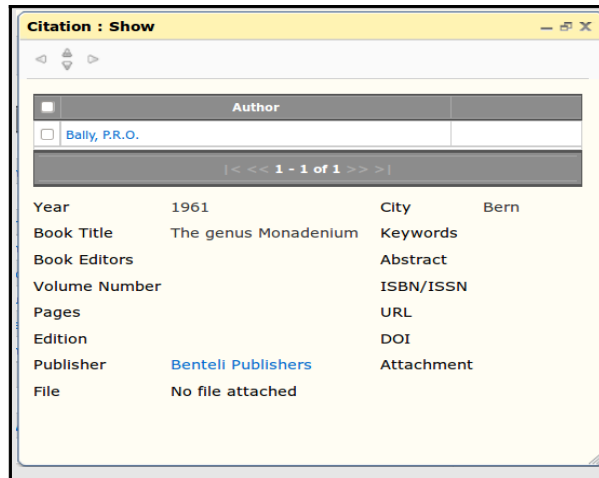


**\*\*Note\*\*** When a Citation is created, the Create Window will close itself and the Citation catalog will refresh itself to display the updated list of Citations



### III. Inspecting/Editing/Deleting a Citation

8. To show the Detail Page of a Citation, click on the desired **Citation**

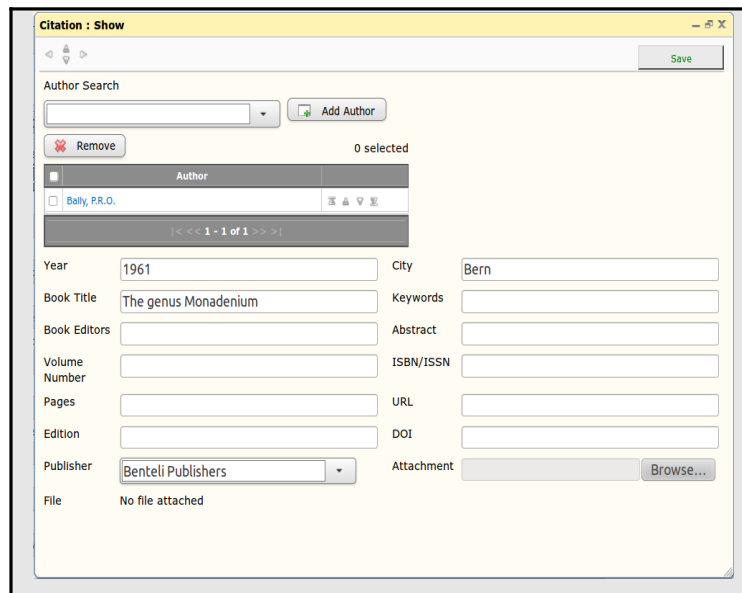


Citation : Show			
<div> <div>Author</div> <div>Bally, P.R.O.</div> </div>			
< < < 1 - 1 of 1 > > >			
Year	1961	City	Bern
Book Title	The genus Monadenium	Keywords	
Book Editors		Abstract	
Volume Number		ISBN/ISSN	
Pages		URL	
Edition		DOI	
Publisher	Benteli Publishers	Attachment	
File	No file attached		




**::Tip::** To make sure the desired Citation is clicked, when the mouse is hovered over it the row should change color to yellow.

9. To edit the meta-data associated of a Citation, make sure that Edit is selected in the Interact Mode Switch (top right-hand corner) | Click the **Citation**



Citation : Show			
<div> <div>Author Search</div> <div> <input type="text"/> <input type="button" value="Add Author"/> </div> <div> <input type="button" value="Remove"/> <div>0 selected</div> </div> </div>			
<div> <div>Author</div> <div>Bally, P.R.O.</div> </div>			
< < < 1 - 1 of 1 > > >			
Year	<input type="text" value="1961"/>	City	<input type="text" value="Bern"/>
Book Title	<input type="text" value="The genus Monadenium"/>	Keywords	<input type="text"/>
Book Editors	<input type="text"/>	Abstract	<input type="text"/>
Volume Number	<input type="text"/>	ISBN/ISSN	<input type="text"/>
Pages	<input type="text"/>	URL	<input type="text"/>
Edition	<input type="text"/>	DOI	<input type="text"/>
Publisher	<input type="text" value="Benteli Publishers"/>	Attachment	<input type="button" value="Browse..."/>
File	No file attached		


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10. Edit/Change the Citation Information | Click the  button



**\*\*Note\*\*** When a record is created, updated and/or deleted, a notification will appear advising that the record has been successfully processed


11. Close the window to return to the Citations Index Page/Catalog

12. To delete a Probe, select the check-box | Click the  button

13. When the confirmation alert box appears, click **OK** 



### Appendix A. Selecting/Adding/Removing Authors/Journal/Publisher/Books and Series Titles

9. From the **Collections Create Page**, click the  button to see the list of available **Authors** | start typing the name to search the **Authors** table

10. Click the Author to populate the field | Click the  button



Author Search

Mayfield  

 0 selected

	Author	
<input type="checkbox"/>	Mayfield	

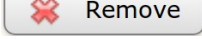
| < << 0 - 0 of 0 >> > |




**\*\*Note\*\*** When an author is added to the collection, the table will be automatically populated and there will be a notification indication the operation was successful.

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**TOLKIN System End User Guide**

11. To remove the author, select the checkbox | click the  button

**Appendix B. Citations Bulk Upload**

5. When provided with a Citations Bulk Upload (XML) File, click the  button
6. Click the Browse button to attach/upload the file

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## TOLKIN System End User Guide

### ***Module Introduction: Chromosome***

The Tolkin end user will need to enter, process and retrieve research information/data regarding chromosomal study. Associated with a particular molecular DNA sequence, the strands are broken into Sequences, sectioned into Probes, stained with dyes and the expressions are captured in images.

#### **Definitions:**

**Sequence** – The precious ordering of the nucleotides (A, C, G, and T) based on DNA composition

**Contig** - Contiguous sequence of DNA by assembling derived from a single genetic source

**Probe** - especially one designed to investigate and obtain information on a specific region

**Dye** – Composition of colors used to recognize the different expressions within a Probe

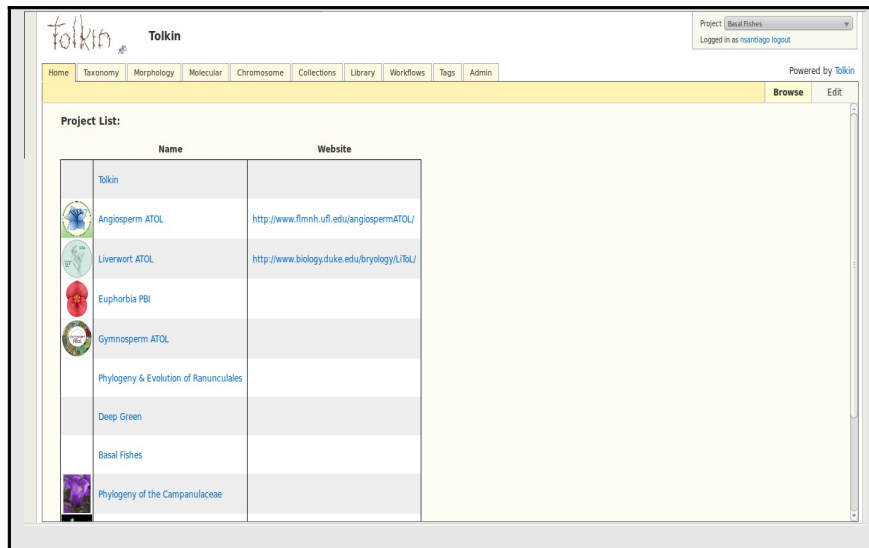
**ZVI File** - microscope image file to save multidimensional images (multichannel fluorescence, time lapse, z-stacks etc.)

## TOLKIN System End User Guide



### I. Logging into Tolkin

13. Launch your browser (Firefox, Chrome, Safari, etc.) | Go to **10.243.11.94:3000/login** | enter **Username** and **Password** | click on the **login** button



14. The Tolkin Projects page is displayed | Select the adequate project (i.e. Basal Fishes)



**\*\*Note\*\*** After the project is selected, the Taxonomy information is displayed and Tab menus are made available

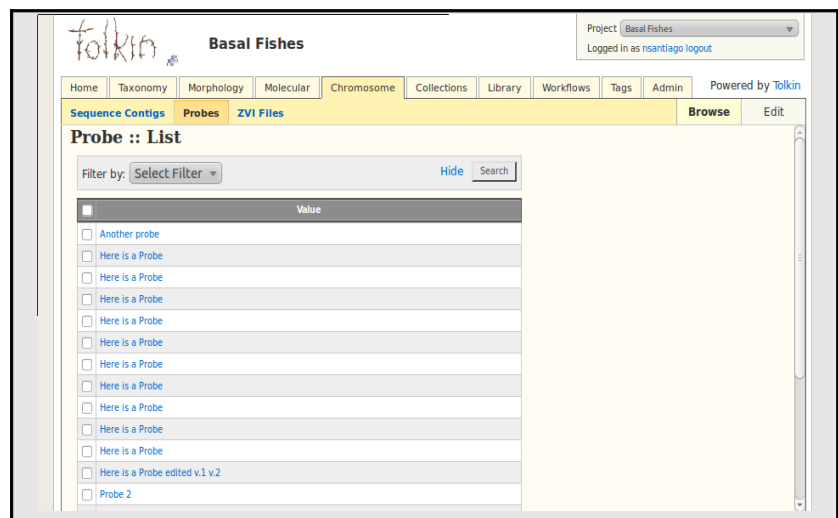


If the mouse hovers on the Chromosome tab a sub, menu appears displaying the options.

15. Click the **Chromosome** tab



**\*\*Note\*\*** To change the project in which work is being performed, you can also select from the top User/Session Frame Project drop-down menu.



16. Click the **Home** tab | **Logout** of the application

## TOLKIN System End User Guide



## II. Creating/Inspecting/Editing/Deleting a Probe

29. Launch your browser (Firefox, Chrome, Safari, etc.) | Go to **10.243.11.94:3000/login** | enter **Username** and **Password** | click on the **Login** button
30. From the Projects Page select **Basal Fishes**
31. From the **Home/Taxonomy Details** page click the **Chromosome** tab

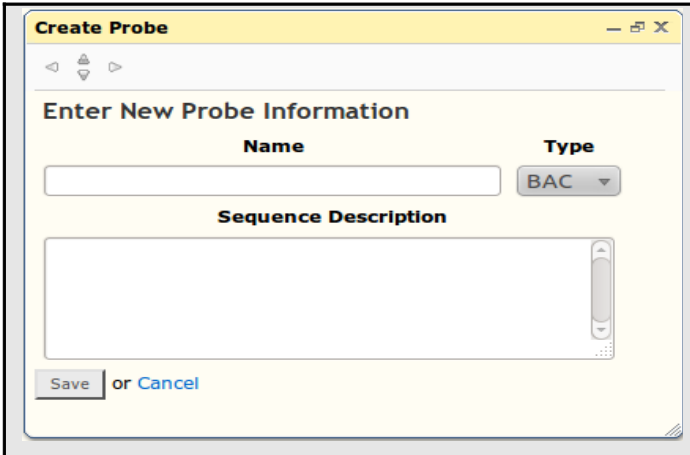


**\*\*Note\*\*** Whenever the user clicks the Chromosome tab, the frame will display the Probes by default



**::Tip::** In Tolkin the pages that display the list of items are called Index Pages (i.e. Probes Index Page)

32. To search for a specific Probe, click/expand the **Filter by:** drop-down menu | Select criteria (i.e. Value) | Click the **Search** button
33. Click the **Edit** button in the Interact Mode Switch (top right-hand corner) | In the Probes catalog click the **Create** button



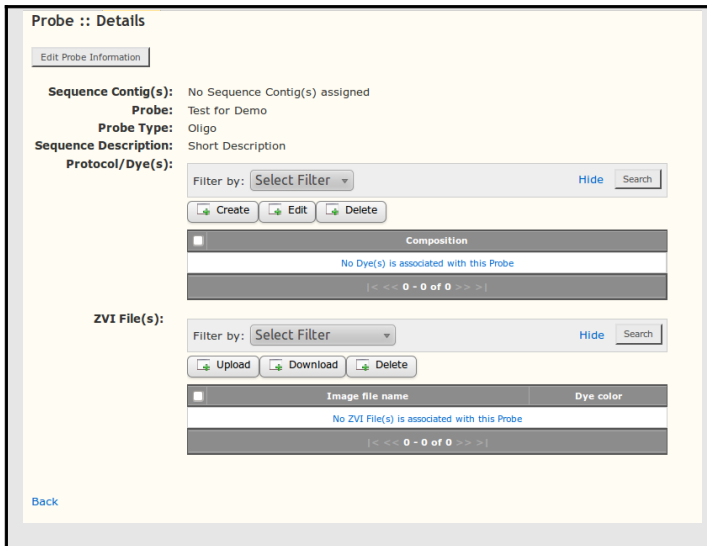
34. Enter the Probe **Name** | Select the **Type** | Enter a **Sequence Description**
35. Click the **Save** button



**\*\*Note\*\*** When a Probe is created, the Create Window will close itself and the Probe catalog will refresh itself to display the updated Index of Probes

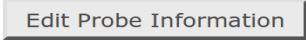
36. To show the Detail Page of a Probe, click on the desired Probe

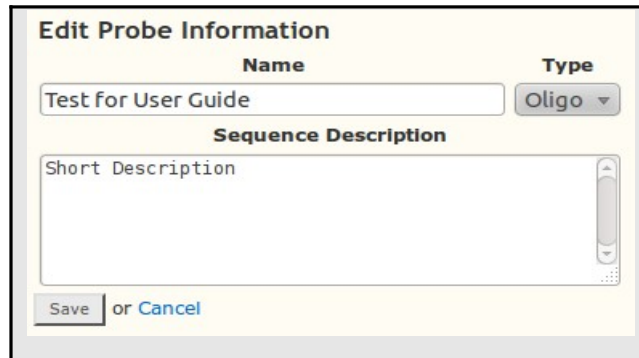
## TOLKIN System End User Guide



**\*\*Note\*\*** When a Probe is newly created, the Details Page will look empty and ready for information and files to be added/attached.

**::Tip::** To make sure the desired Probe is clicked, when the mouse is hovered over it the row should change color to yellow.

37. To edit the meta-data associated of a Probe, make sure that Edit is selected in the Interact Mode Switch (top right-hand corner) | Click the  button



38. Edit/Change the Probe Information | To manage the Dyes and ZVI Files from the Probe Details page see Appendix A.


39. Click the  button

**\*\*Note\*\*** When a record is created, updated and/or deleted, a notification will appear advising that the record has been successfully processed

40. Click the Probes sub-menu option to return to the Probes Index page or press the **Back** link at the bottom of the Details page

## TOLKIN System End User Guide

41. To delete a Probe, select the check-box | Click the  button

42. When the confirmation alert box appears click **OK** 

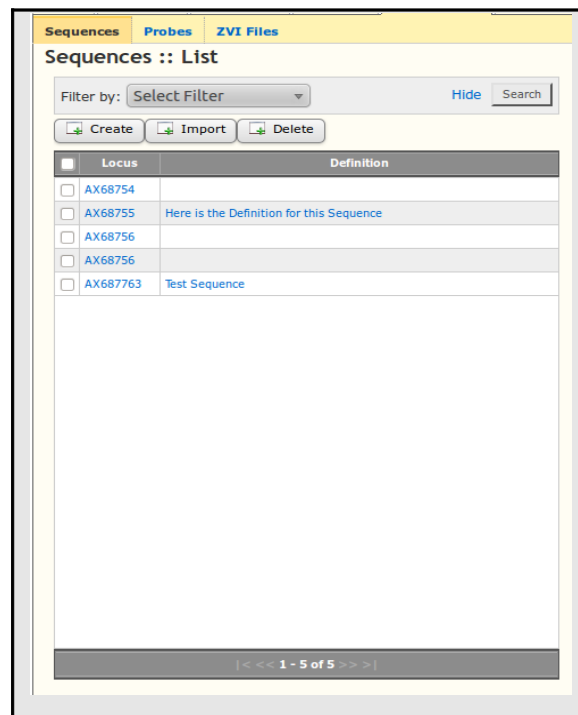


### III. Creating/Inspecting/Editing/Deleting a Sequence

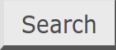
12. Launch your browser (Firefox, Chrome, Safari, etc.) | Go to **10.243.11.94:3000/login** | enter **Username** and **Password** | click on the **Login** button

13. From the Projects Page select **Basal Fishes**

14. With the mouse, hover over the **Chromosome** tab | Click the **Sequences** sub-menu




**::Tip::** In Tolkin the pages that display the list of items are called *Index Pages* (i.e. *Sequences Index Page*)

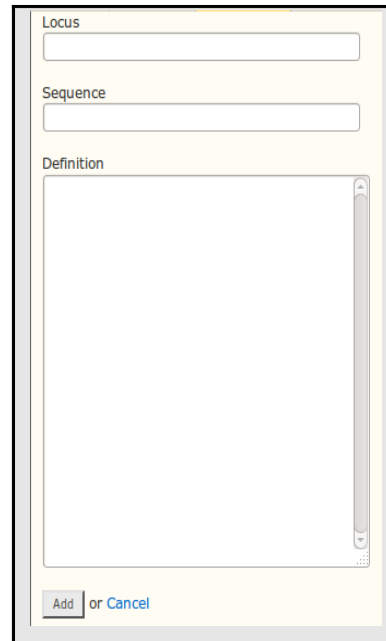
15. To search for a specific Sequence, click/expand the **Filter by:** drop-down menu | Select criteria (i.e. Locus) | Click the  button

16. Click the **Edit** button in the Interact Mode Switch (top right-hand corner) | In the Sequences catalog click the  button




## TOLKIN System End User Guide

 **\*\*Note\*\*** To create a Sequence all that is required is to enter the Locus, Sequence and the Definition. The rest of the information associated with the Sequence can be entered within the Details page.

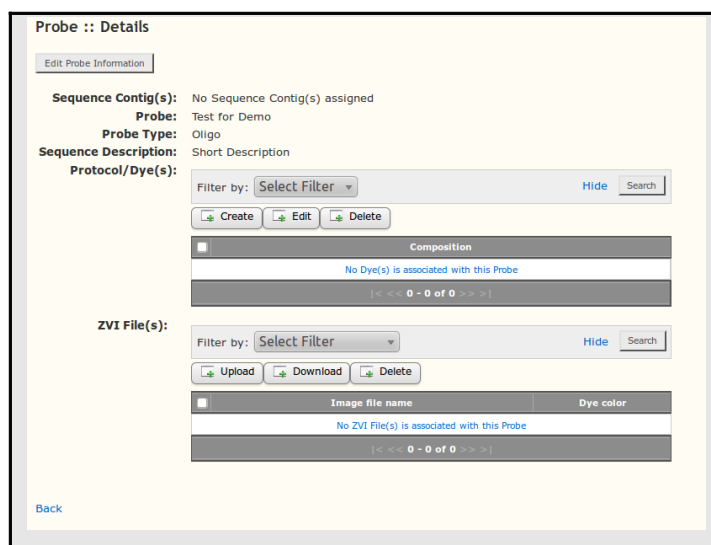



17. Enter the **Locus** | Enter the **Sequence** | Enter a **Definition**

18. Click the  button

 **\*\*Note\*\*** When a Sequence is created, the catalog will refresh itself to display the updated Index of Sequences

19. To show the Detail Page of a Sequence, click on the desired Sequence



 **\*\*Note\*\*** When a Sequence is newly created, the Details Page will look empty and ready for information and files to be added/attached.

## TOLKIN System End User Guide



**::Tip::** To make sure the desired record is clicked within a catalog, when the mouse is hovered over it the row should change color to yellow.

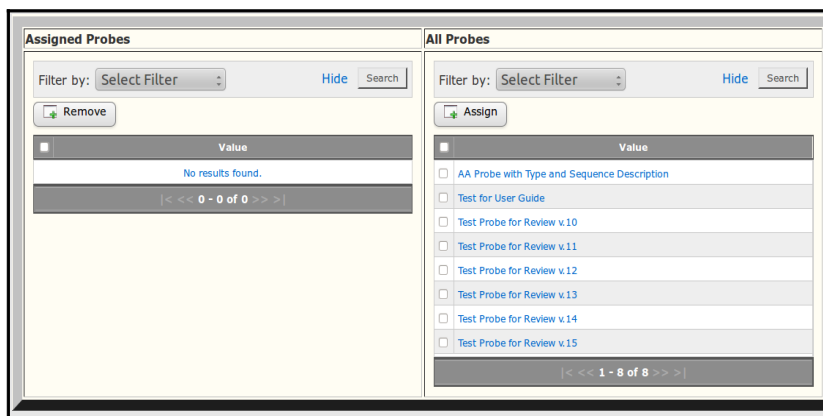
20. To edit the meta-data associated of a Sequence, make sure that Edit is selected in the Interact Mode Switch (top right-hand corner) | Enter the information that needs to be added

21. Click the  button

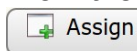


**\*\*Note\*\*** When a record is created, updated and/or deleted, a notification will appear advising that the record has been successfully processed

22. If there are Probes that need to be associated with the particular Sequence, scroll to the bottom of page and find the Probe association panel



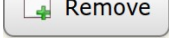
23. From the All Probes section select the check box of the appropriate record | click the



button




**::Tip::** To see preliminary information about a particular Probe within the Probes Panel, hover the mouse over a record and a “tooltip” will appear displaying information.

24. To dis-associate a Probe, select the check-box | Click the  button




**::Tip::** A Probe Details Page can be accessed by clicking the Probe in the catalog

25. To Delete a Sequence, go to the **Sequences Index Page** by clicking the Sequences sub-menu | Select the check-box for a Sequence | Click the  button

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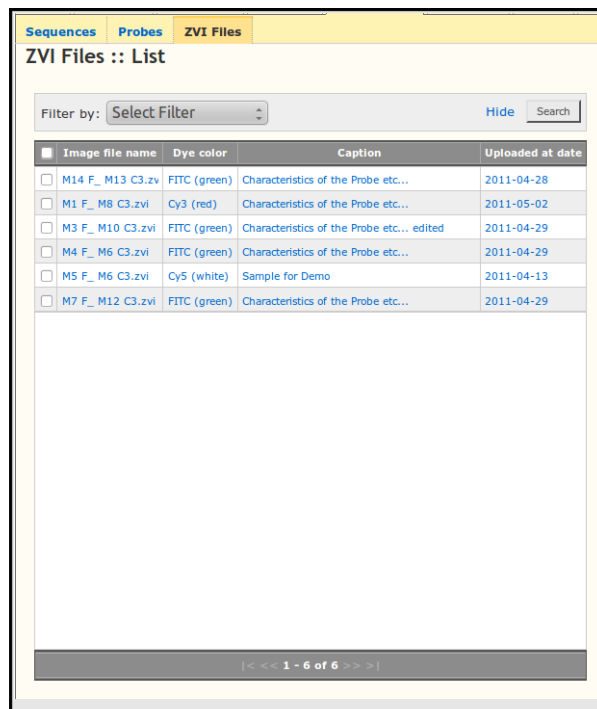
26. When the confirmation alert box appears click **OK** 

## TOLKIN System End User Guide



### IV. Creating/Downloading/Inspecting/Editing/Deleting a ZVI File

7. Launch your browser (Firefox, Chrome, Safari, etc.) | Go to **10.243.11.94:3000/login** | enter **Username** and **Password** | click on the **Login** button
8. From the Projects Page select **Basal Fishes**
9. With the mouse hover over the **Chromosome** tab | Click the **ZVI Files** sub-menu



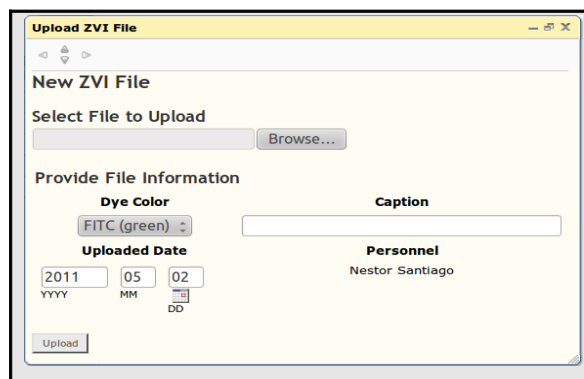
**ZVI Files :: List**

Filter by: Select Filter Hide Search

<input type="checkbox"/>	Image file name	Dye color	Caption	Uploaded at date
<input type="checkbox"/>	M14_F_M13_C3.zv	FITC (green)	Characteristics of the Probe etc...	2011-04-28
<input type="checkbox"/>	M1_F_M8_C3.zvi	Cy3 (red)	Characteristics of the Probe etc...	2011-05-02
<input type="checkbox"/>	M3_F_M10_C3.zvi	FITC (green)	Characteristics of the Probe etc... edited	2011-04-29
<input type="checkbox"/>	M4_F_M6_C3.zvi	FITC (green)	Characteristics of the Probe etc...	2011-04-29
<input type="checkbox"/>	M5_F_M6_C3.zvi	Cy5 (white)	Sample for Demo	2011-04-13
<input type="checkbox"/>	M7_F_M12_C3.zvi	FITC (green)	Characteristics of the Probe etc...	2011-04-29

< << 1 ~ 6 of 6 >> >

10. To search for a specific ZVI File, click/expand the **Filter by:** drop-down menu | Select criteria (i.e. Caption) | Click the Search button
11. Click the **Edit** button in the Interact Mode Switch (top right-hand corner) | In the ZVI Files catalog click the Upload button



**Upload ZVI File**

**New ZVI File**

Select File to Upload Browse...


**Provide File Information**

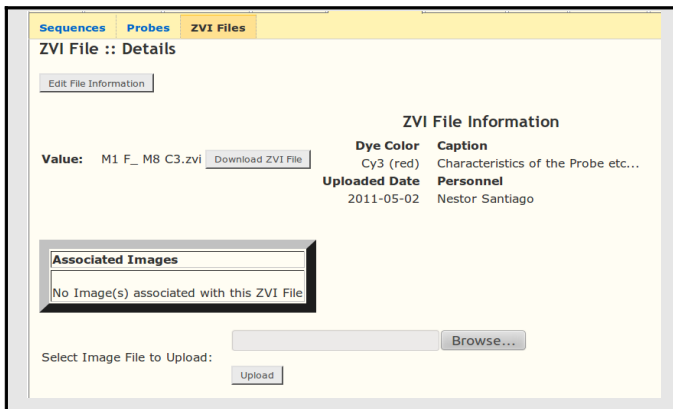
**Dye Color** FITC (green) **Caption**


**Uploaded Date** 2011-05-02 **Personnel** Nestor Santiago


Upload

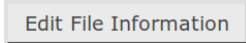
## TOLKIN System End User Guide

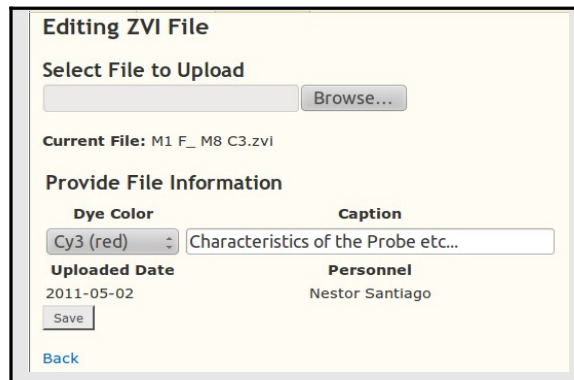
12. Select the file to be uploaded by clicking the **Browse** button | Select the **Dye Color** | Provide text in the **Caption** field | Click the **Upload** button
13. To save a file, select the check-box of the record | Click the  button
14. In dialog window, select options regarding downloading (browser specific) | Click **OK**
15. To show the Detail Page of a ZVI File, click on the desired ZVI File



 **\*\*Note\*\*** When a ZVI File is newly created from the Index page, the Details Page no Images or Probes will be associated with this record.

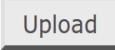
 **::Tip::** To make sure the desired record is clicked, when the mouse is hovered over it the row should change color to yellow.

16. To edit the meta-data associated of a ZVI File, make sure that Edit is selected in the Interact Mode Switch (top right-hand corner) | Click the  button



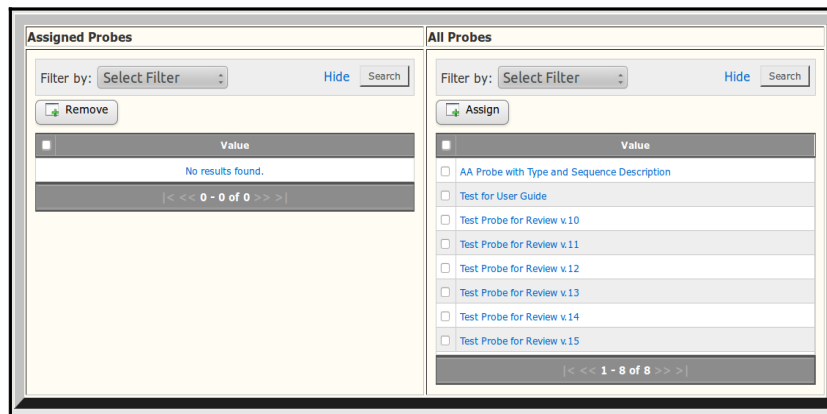
17. Edit/Change the ZVI File Information | Click the  button

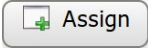
## TOLKIN System End User Guide

18. To attach Images to the ZVI File, from the **Details Page** click the **Browse** button below the Images panel | Select the Image to upload | Click the  button

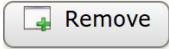


19. If there are Probes that need to be associated with this particular ZVI File, scroll to the bottom of page and find the Probe association panel



20. From the All Probes section select the check box of the appropriate record | click the  button


 **Tip:** To see preliminary information about a particular Probe within the Probes Panel, hover the mouse over a record and a "tooltip" will appear displaying information.

21. To dis-associate a Probe, select the check-box | Click the  button

## TOLKIN System End User Guide



**Tip:** A Probe Details Page can be accessed by clicking the Probe in the catalog

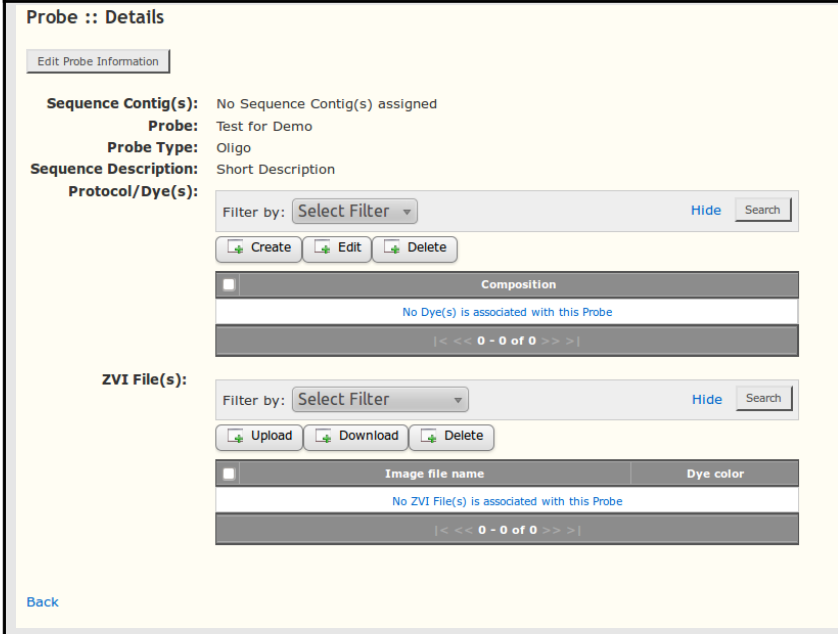
22. To Delete a ZVI File, go to the **ZVI Files Index Page** by clicking the ZVI Files sub-menu | Select the check-box for a ZVI File | Click the  Delete button

23. When the confirmation alert box appears, click **OK** 



## Appendix A. Managing Dyes and ZVI Files from the Probes Detail Page

Once in the Probes Detail Page...



Probe :: Details

Edit Probe Information

Sequence Contig(s): No Sequence Contig(s) assigned

Probe: Test for Demo

Probe Type: Oligo

Sequence Description: Short Description

Protocol/Dye(s):

Filter by: Select Filter Hide Search

Create Edit Delete

Composition

No Dye(s) is associated with this Probe

<< 0 - 0 of 0 >>

ZVI File(s):

Filter by: Select Filter Hide Search

Upload Download Delete

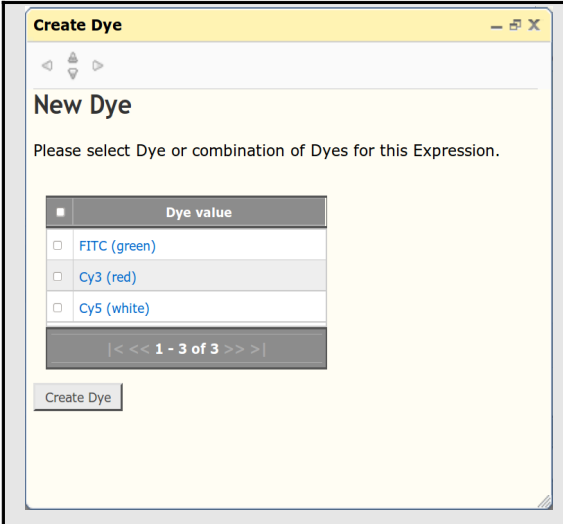
Image file name Dye color

No ZVI File(s) is associated with this Probe

<< 0 - 0 of 0 >>

Back

14. To **Create** a Dye, while in **Edit Interaction Mode**, click the  Create button in the Dyes catalog



Create Dye

New Dye

Please select Dye or combination of Dyes for this Expression.

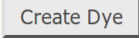
Dye value
<input type="checkbox"/> FITC (green)
<input type="checkbox"/> Cy3 (red)
<input type="checkbox"/> Cy5 (white)

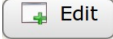
<< 1 - 3 of 3 >>

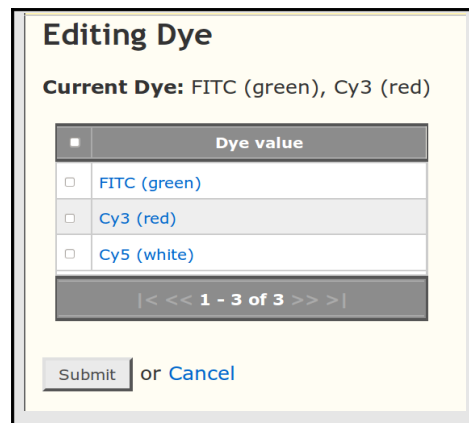
Create Dye

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15. Select the **Dye** or combination of Dyes | Click the  button

16. To **Edit** a Dye, select the check-box of the record | Click the  button




**Editing Dye**


**Current Dye:** FITC (green), Cy3 (red)

<input type="checkbox"/>	Dye value
<input type="checkbox"/>	FITC (green)
<input type="checkbox"/>	Cy3 (red)
<input type="checkbox"/>	Cy5 (white)

| < < 1 - 3 of 3 > > |

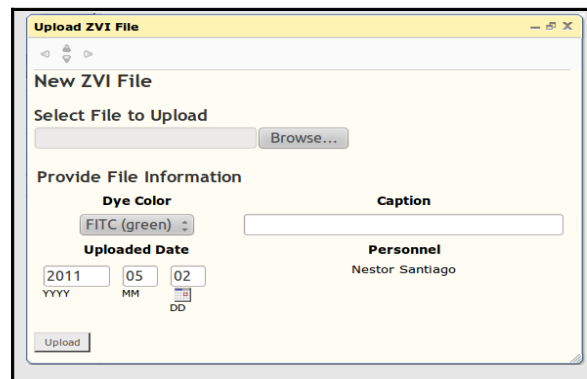
 or [Cancel](#)

17. Select the new combination | Click the  button

18. To **Delete** a Dye, select the check-box of the record | click the  button


19. When the confirmation alert box appears, click **OK**

20. To **Upload** a ZVI File, while in **Edit Interaction Mode**, click the  button in the ZVI File's catalog

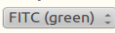



**Upload ZVI File**

**New ZVI File**

Select File to Upload  
 

Provide File Information

<b>Dye Color</b>	<b>Caption</b>
 FITC (green)	<input type="text"/>
<b>Uploaded Date</b>	<b>Personnel</b>
2011 05 02 YYYY MM DD	Nestor Santiago

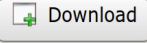




21. Select the file to be uploaded by clicking the **Browse** button | Select the **Dye Color** | Provide text in the **Caption** field | Click the **Upload** button



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**TOLKIN System End User Guide**

22. To save a file, select the check-box of the record | Click the  Download button
23. In dialog window, select options regarding downloading (browser specific) | Click **OK**
24. To Delete a ZVI File, go to the **ZVI Files Index Page** by clicking the ZVI Files sub-menu | Select the check-box for a ZVI File | Click the  Delete button
25. When the confirmation alert box appears click **OK** 

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## TOLKIN System End User Guide

### ***Module Introduction: Morphology***

The Taxonomy manages taxonomic information. It allows the user to manage the species names as an informatics tool. Taxonomy being the science that describes organisms.

#### **Definitions:**

**Taxon** – Any group of organisms, at any level of the hierarchical representation

**Taxon Tree** – Hierarchical representation of the relationship between species via their names

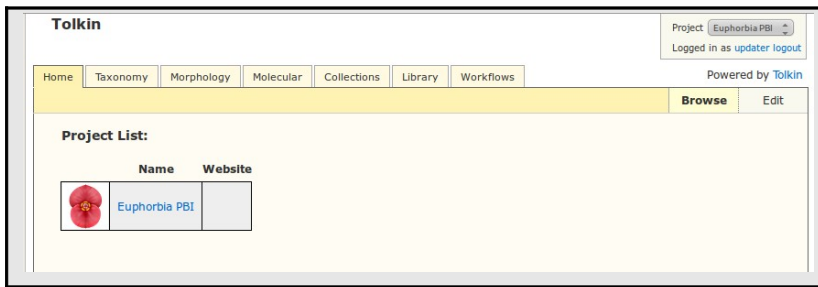
**Otu** – Operational Taxonomic Unit, an informal group of organisms for the purpose of study. Most times the names of Otus are arbitrary for ease of work within an organization.

## TOLKIN System End User Guide



### I. Logging into Tolkin

17. Launch your browser (Firefox, Chrome, Safari, etc.) | Go to **10.243.11.94:3000/login** | enter **Username** and **Password** | click on the **login** button



**\*\*Note\*\*** To change the project in which work is being performed, you can also select from the top User/Session Frame Project drop-down menu.

18. The Tolkin Projects page is displayed | Select the adequate project (i.e. Gymnosperm ATOL)

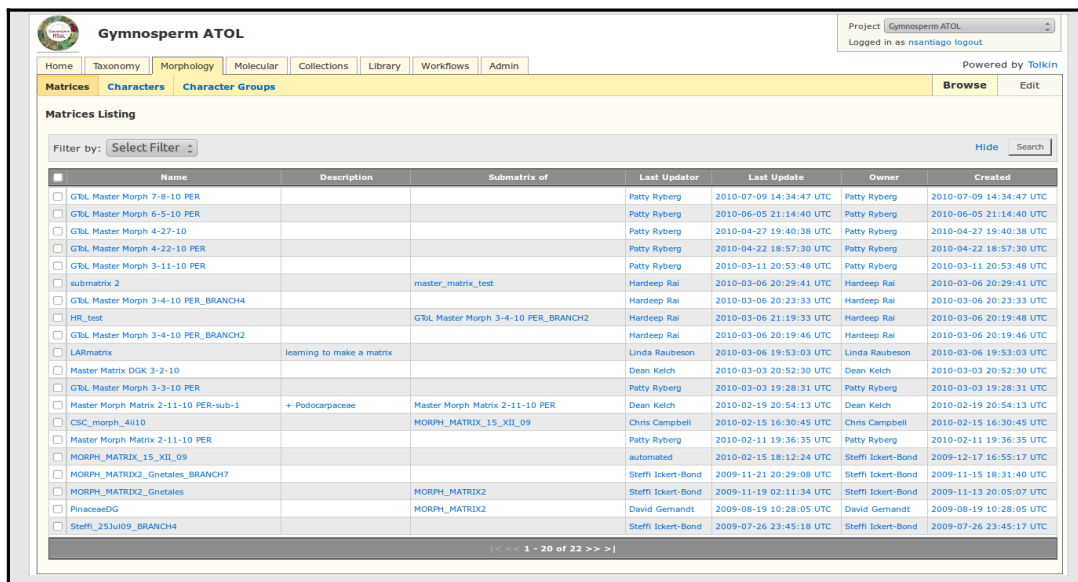


**\*\*Note\*\*** After the project is selected, the Taxonomy count in the Launch page is displayed and Tab menus are made available



If the mouse hovers on the Taxonomy tab a sub menu appears displaying the options.

19. Click the **Morphology** tab or click the **Taxon Tree Icon**



20. Click the **Home** tab | **Logout** of the application 

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TOLKIN System End User Guide

## II. Navigation and Search Filters

43. After the user is logged into the TOLKIN application | From the Projects Page select **Gymnosperm ATOL**

44. From the **Home/Taxonomy Details** page click the **Morphology** tab



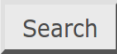
**\*\*Note\*\*** Whenever the user clicks the Morphology tab the frame will display the Matrices Catalog by default



**::Tip::** Within the Morphology module the pages that display the list of items is called a Listing (i.e. Characters Listing)

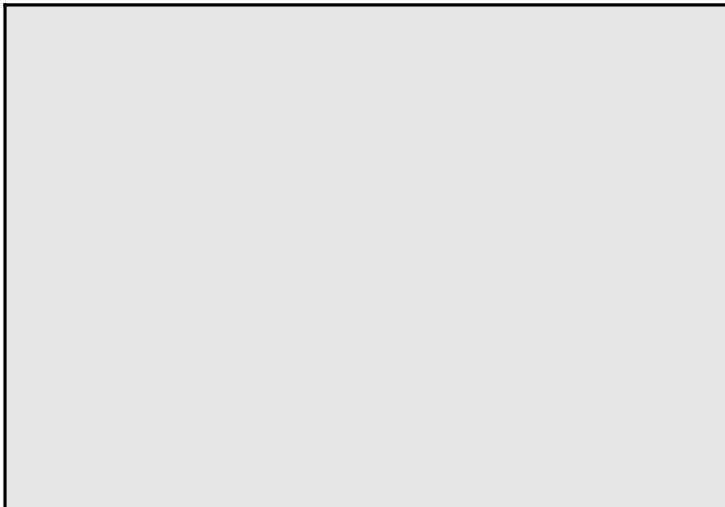


**\*\*Note\*\*** The bottom of the catalog contains the pagination bar with the buttons to browse through all the records

45. To search for a specific Matrix/Character/Character Group, click/expand the **Filter by:** drop-down menu | Select criteria (i.e. Name) | Click the  button

46. Click the **Edit** button in the Interact Mode Switch (top right-hand corner), buttons will be displayed

47. To show the Detail Page of a record click on the desired Matrix



**\*\*Note\*\*** When a Matrix is newly created the Details Page will look empty and ready for information and files to be added/attached.



**::Tip::** To make sure the desired Matrix is clicked, when the mouse is hovered over it the row should change color to yellow.

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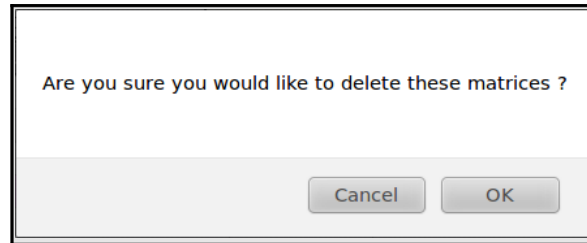
## TOLKIN System End User Guide




**\*\*Note\*\*** Only users that have the appropriate matrix of roles and permissions associated with them will be able to create/modify information.

48. To reach the Matrices Listing Catalog, click the Morphology menu option or the Matrices sub-menu option to return to the Matrices Listing page

49. To delete a Matrix, select the check-box | Click the  Delete button



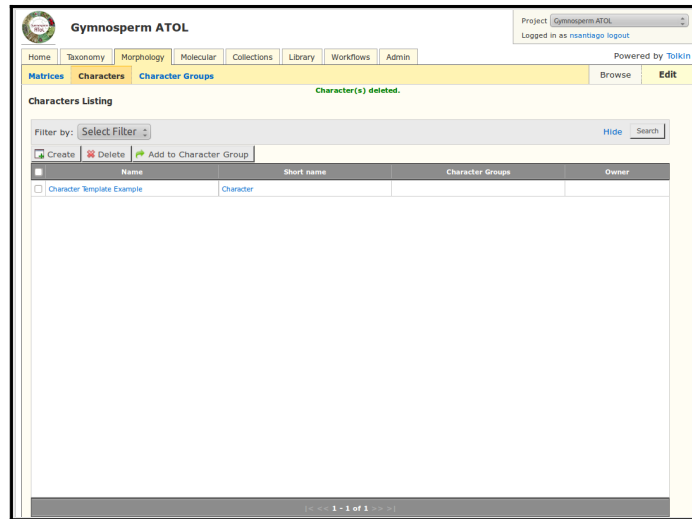
50. When the confirmation alert box appears click **OK** 

## TOLKIN System End User Guide



### III. Characters Listing Navigation

27. After the user is logged into the TOLKIN application | The Gymnosperm ATOL project is selected | navigate to Morphology/Characters to display the **Characters**



28. From the **Characters Listing** catalog page click the record to be viewed/inspected

