

Detailed Help

TO BEGIN A SEARCH

The web interface is designed to be as intuitive and user-friendly as possible, incorporating common search parameters such as *wild cards* and filtering to narrow search results. The retrieved results are presented in three main steps (or pages); with each step providing more detail on those specimens that meet the user's search criteria. However, in order to limit the display of superfluous data the user is allowed to select those species of interest on which he/she requires more detail.

The functioning of the main search page is divided into two main areas or sections (Figure 1). On the left is the main query form, where search parameters may be submitted. To the right of this panel, the page displays the welcome screen, summaries of search results and specimen images using the ExpressView™ browser plug-in from Lizardtech™.

Taxonomic Nomenclature

Family:
Genus:
Species:

Collection Info

Main Collector:
Partner(s):
Accession#:
UWI-Barcode#: UCWI-
Collection Date (yyyy-mm-dd): 0000
Label Text:
Common Name:

Locality Information

Country:
State/Parish/Province:
Town/Locality:
Habitat:
Min. Elev. (ft.):

Sort By:
 Family Genus Tally

Welcome

Welcome to the online portal of the University of the West Indies' and Institute of Jamaica's Virtual Herbarium. We are currently testing our facility and welcome you to be a part of that process. Please feel free to use the query terminal to the left of this message to enter your search parameter(s) and when ready click on the "Submit Query" button to begin your search. There are hints that will pop-up if you hover your cursor over the respective input boxes.

This project began by cataloguing the collections of W. M. Harris at UWI and G. R. Proctor at IOJ, with focus placed on 10 families/subfamilies. Namely:

- Annonaceae
- Bignoniaceae
- Caesalpiniaceae/Caesalpinioideae
- Euphorbiaceae
- Lauraceae
- Mimosaceae/Mimosoideae
- Moraceae
- Myrtaceae
- Papilionaceae/Faboideae
- Rubiaceae

Data entry continues and currently 1,638 specimen-records are available for query.

Please Note:

- In order to view any specimen you will need the following plug-in:
- A percentage sign (%) may be used as a wild card to help with searches. E.g.:
 - o Entering species name as "jam%" will return results for those records with species names beginning with "jam".
 - o Entering species name as "%mosa" will return results for those records with species names ending with "mosa".
 - o When searching for a locality which may have the word "pen" in its name use, "%pen%".
- If you have any feedback please submit them to phlip.rose02@uwimona.edu.jm.

Figure 1: Main Query Screen of the Jamaican Virtual herbarium Website showing on the left, the main query form for the entry of search parameters and on the right (highlighted by dashed border), the frame in which query results and images are presented.

The main query form consists of a series of text entry fields and pull-down menus, where any and all fields may be used to help narrow one's search results (Figure 2). In any text field, wildcards (e.g. '*', '%' or '_')¹ may be combined with an entry to search for a range of results. This is useful for searching for terms where the user is either unsure of the spelling or requires a range of results based on a pattern (e.g. when searching for specimens collected in the 1800's the user may enter '18%' in the year field for *Collection Date* to retrieve those results; however, entering '18_4' will retrieve specimens collected in the 1800's for those years ending with the numeral 4).

The screenshot shows a web-based query form with the following sections:

- Taxonomic Nomenclature:** Three text input fields for Family, Genus, and Species.
- Collection Info:** Text input fields for Main Collector, Partner(s), Accession#, and Common Name. A UWI-Barcode# field with a prefix 'UCWI-' and a text input. A Collection Date (yyyy-mm-dd) field with three dropdown menus for year, month, and day. A Label Text text input field.
- Locality Information:** A Country dropdown menu (set to 'Jamaica'), a State/Parish/Province dropdown menu, a Town/Locality text input field, a Habitat text input field, and a Min. Elev. (ft.) text input field.
- Sort By:** Three radio buttons for Family, Genus (which is selected), and Tally.

At the bottom of the form are two buttons: 'Submit Query' and 'Reset Form'.

Figure 2: Close-up of the main query form of the JVH showing varying input fields employed and the 4 subsections (field sets) of its layout

The form, itself, is divided into four subsections. These allow the user to search by taxonomic nomenclature, collection information and locality, as well as the results may be sorted according to family, genus or by result-tally. For the purposes of this project only specimens collected in Jamaica can be searched and this parameter is fixed within the *Country* field of the *Locality Information* subsection/field-set.

After entering your parameters click the *Submit Query* button to go to the next step, or *Reset Form* to clear the fields.

¹ Wildcard use: the symbol, '%' or '*', matches any number of characters, even zero characters; while '_' matches exactly any one character

STEP 1: SUMMARY OF SEARCH RESULTS

This is the first step after first entering your search criteria. You are presented with table that reports how many records matched your query in both the University of the West Indies (UWI) and Institute of Jamaica (IOJ) database-tables (Figure 3). In this case there were 49, UWI records and 29, IOJ records. The user may then select either herbarium to continue their search (for this example, the UWI herbarium was selected).

Step 1 - Summary of Search Results

Your query yielded the following hits for each database below. Please select the database you wish to view further results for...

| <u>Choice</u> | <u>Database</u> | <u>Records</u> |
|-----------------------|-------------------------------|----------------|
| <input type="radio"/> | University of the West Indies | 49 |
| <input type="radio"/> | Institute of Jamaica | 63 |

<< HOME << Clear Selections >>Continue>>

Figure 3: First step of search results (right panel shown only) displaying the number of records/specimens that met the search criteria of for the genus entered as 'Calyp%' that occurred within each database table.

Select a database table and click Continue.

STEP 2: DATABASE SEARCH RESULTS

You are now presented with another summary table (Figure 4) that displays the family, botanical and vernacular names for those species matching your search criteria. Included also on this page is the tally or total number of records found for each species (with a grand total at the end of the list); and checkboxes that allows you, the user, to select any or all the species in which he/she was interested. For this example there were 9 species, all belonging to the family Myrtaceae and totalling 49 specimens, found within the UWI database that matched the given search criteria. If you are interested in the species *Calyptranthes zuzygium*, which has 17 specimens in the database, you may select it and continue to the next step (selected items appear highlighted on mouse-over).

| Step 2 - UWI Database Search Results | | | | | |
|--|-----------|--|--------------------|-------------------|-------------------------------------|
| Please select those species of interest... | | | | | |
| The information for those items indicated as being "Restricted" have been withheld due to their endemism and/or rarity in Jamaica. To receive further information on these specimens please contact the webmaster, Mr. Philip Rose (philip.rose02@uwimona.edu.jm). | | | | | |
| # | Family | Botanical Name | Vernacular | Tally | Select |
| 1. | Myrtaceae | <i>Calyptranthes acutissima</i> , Urb. | | 1 | Restricted |
| 2. | Myrtaceae | <i>Calyptranthes chytraculia</i> , (L.) Sw. | Bastard Greenheart | 11 | <input type="checkbox"/> |
| 3. | Myrtaceae | <i>Calyptranthes discolor</i> , Urb. | Mountain Bay | 1 | Restricted |
| 4. | Myrtaceae | <i>Calyptranthes nodosa</i> , Urb. | Rodwood | 3 | Restricted |
| 5. | Myrtaceae | <i>Calyptranthes pallens</i> , (Poir.) Griseb. | | 4 | <input type="checkbox"/> |
| 6. | Myrtaceae | <i>Calyptranthes rigida</i> , Sw. | | 5 | <input type="checkbox"/> |
| 7. | Myrtaceae | <i>Calyptranthes umbelliformis</i> , Krug & Urb. | | 6 | <input type="checkbox"/> |
| 8. | Myrtaceae | <i>Calyptranthes wilsonii</i> , Griseb | | 1 | Restricted |
| 9. | Myrtaceae | <i>Calyptranthes zuzygium</i> , (L.) Sw. | | 17 | <input checked="" type="checkbox"/> |
| Total: | | | | 49 records | |
| <div style="display: flex; justify-content: space-around; margin-top: 10px;"> << BACK << Select All Clear Selections >>Continue>> </div> <div style="text-align: center; margin-top: 5px;"> Print </div> | | | | | |

Figure 4: Step two of search results (right panel shown only) displaying a result summary for specimen within the UWI database table that corresponded with the search parameter ‘Calyp%’ in the *Genus* field.

STEP 3: DETAILED QUERY RESULTS

This final step provides more information regarding the selected species (Figure 5). It displays the family; botanical name; specimen barcode number (not available for IOJ specimens); herbarium accession number; collector; collection date (in *yyyy-mm-dd* format for UWI specimens, but *dd month, yyyy* format for IOJ specimens); the altitude the specimen was collected at; the general habitat in which the plant was found; and the location where each specimen was collected. The barcode and accession numbers for the UWI and IOJ specimens respectively, were clickable and provided the user with a JPEG 2000 image of the specimen that could be magnified at points of interest using the Lizardtech ExpressView™ browser plug-in (Figure 6).

| Step 3 - Detailed Query Results - UWI | | | | | | | | | |
|--|-----------|---------------------------------------|---------------------------|------------|------------|-----------------|----------|---------|--|
| You may click on any barcode number to view an image of that specimen... | | | | | | | | | |
| # | Family | Botanical Name | Barcode | Accession# | Collector | Collection Date | Altitude | Habitat | Location, State/Province, COUNTRY |
| 1. | Myrtaceae | <i>Calyptanthes zuzygium</i> (L.) Sw. | UCWI01055 | 5027 | Wm. Harris | 1893-08-21 | N/A | | Silver Hill, Portland - JAMAICA |
| 2. | Myrtaceae | <i>Calyptanthes zuzygium</i> (L.) Sw. | UCWI01056 | 5074 | Wm. Harris | 1893-11-25 | N/A | | Silver Hill, Portland - JAMAICA |
| 3. | Myrtaceae | <i>Calyptanthes zuzygium</i> (L.) Sw. | UCWI01057 | 5075 | Wm. Harris | 1893-11-25 | N/A | | Silver Hill, Portland - JAMAICA |
| 4. | Myrtaceae | <i>Calyptanthes zuzygium</i> (L.) Sw. | UCWI01058 | 5073 | Wm. Harris | 1893-12-31 | N/A | | near Bryan's Hill, Clarendon - JAMAICA |
| 5. | Myrtaceae | <i>Calyptanthes zuzygium</i> (L.) Sw. | UCWI01059 | 5178 | Wm. Harris | 1894-06-02 | N/A | | near Bryan's Hill, Clarendon - JAMAICA |
| 6. | Myrtaceae | <i>Calyptanthes zuzygium</i> (L.) Sw. | UCWI01060 | 5324 | Wm. Harris | 1894-08-29 | N/A | | old road to Sheldon, Unknown - JAMAICA |
| 7. | Myrtaceae | <i>Calyptanthes zuzygium</i> (L.) Sw. | UCWI01061 | 5324 | Wm. Harris | 1894-08-29 | N/A | | old road to Sheldon, Unknown - JAMAICA |
| 8. | Myrtaceae | <i>Calyptanthes zuzygium</i> (L.) Sw. | UCWI01062 | 5338 | Wm. Harris | 1894-09-07 | N/A | | Hamilton Town, Unknown - JAMAICA |
| 9. | Myrtaceae | <i>Calyptanthes zuzygium</i> (L.) Sw. | UCWI01063 | 5549 | Wm. Harris | 1895-01-15 | N/A | | Mona Wood, Saint Andrew - JAMAICA |

Figure 5: Step three of search results (right panel shown only) displaying a detailed result table for specimen within the UWI database for the species *Calyptanthes zuzygium*.

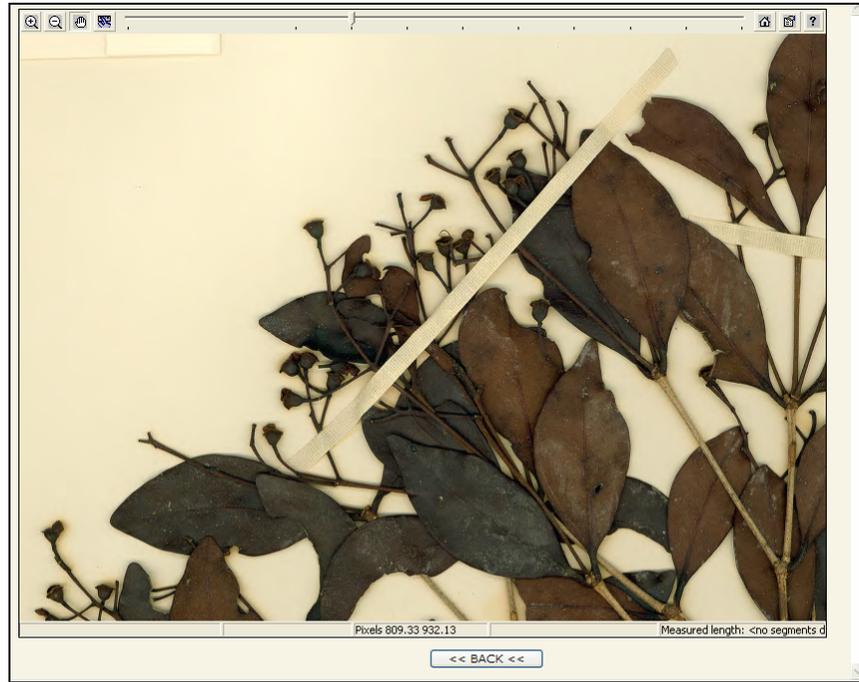


Figure 6: Close-up of JPEG 2000 image for a specimen of *Calyptanthes zuzygium* (*above*); Control bar located at top of Lizardtech ExpressView™ browser plug-in (*below*)

