

Searching the CMH Database

The Consortium of Midwest Herbaria (CMH; midwestherbaria.org) supports a database of herbarium specimens that documents the flora of the upper Midwest, including Indiana. Currently the database contains almost 205,000 records for Indiana. Approximately 54,000 of these are collections by Charles Deam, specimens he amassed for his *Flora of Indiana* published in 1940. The Indiana University Herbarium, with its thoroughly digitized collection, has 73,000 specimens from Indiana. The Morton Arboretum in Lisle, Illinois has another 13,000 thoroughly digitized specimens from Indiana, particularly of the rich flora in the northwest corner of the state.

Let's explore the database of the Indiana University Herbarium. On the navigation bar found on the CMH homepage, select Specimen Search>Search Collections as shown below.



The next webpage lists the herbaria that are in the Midwest and beyond. One can perform a search based upon all the herbarium or select a subset.

Home >> Collections

Specimens & Observations Specimens Observations Federal Units

Select/Deselect All

Consortium of Midwest Herbaria

Search >


- Albion College (ALBC) more info...
- Amway Herbarium (AMWH) more info...
- Augustana College (AUGIE) more info...
- Butler University, Friesner Herbarium (BUT) more info...
- Calvin College (CALVIN) more info...
- Central Michigan University Herbarium (CMC) more info...
- Chicago Botanic Garden (CHIC) more info...
- Eastern Illinois University, Stover-Ebinger Herbarium (EIU) more info...
- Eastern Michigan University Herbarium (EMC) more info...

The next steps show how to use Indiana University Herbarium (IND) alone. We recommend that for any preliminary search since this collection is thoroughly digitized and up-to-date.

Click the Select/Deselect box to clear all the check marks.

Home >> Collections

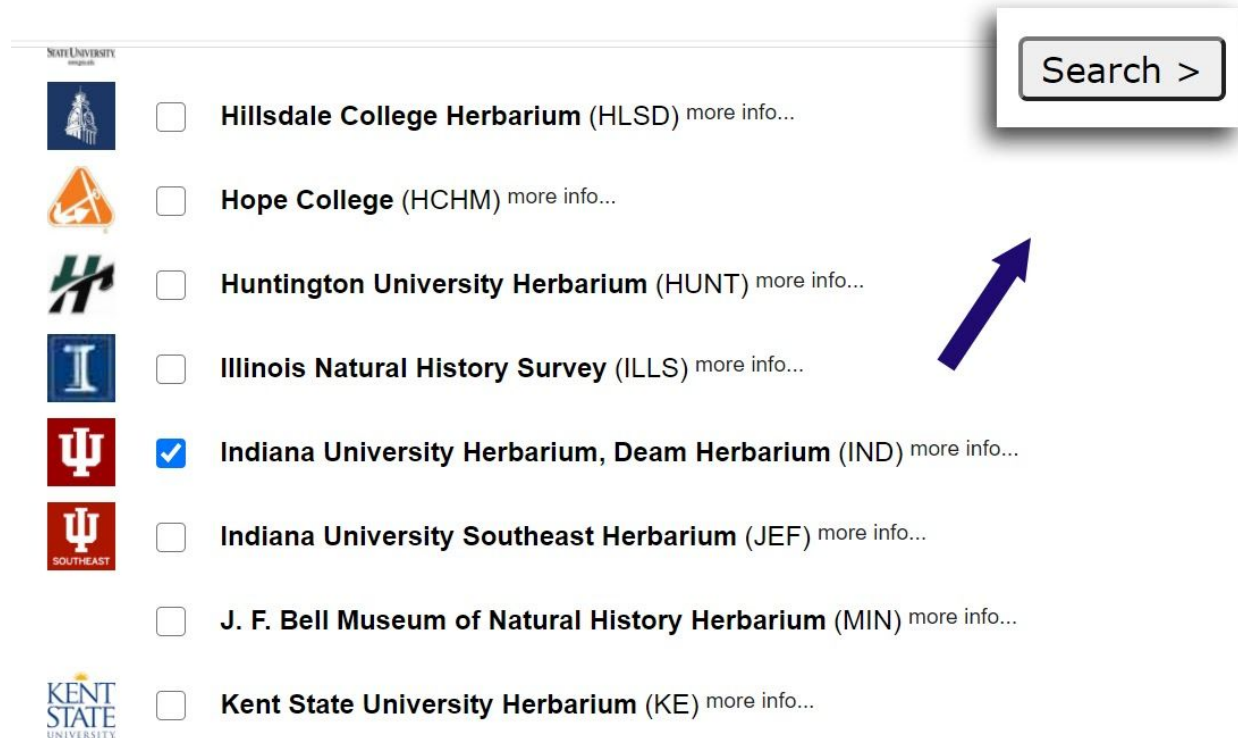
Specimens & Observations Specimens Specimens & Observations Specimens

Select/Deselect All  Select/Deselect All

Consortium of Midwest Herbaria Consortium of Midwest Herbaria

- Albion College (ALBC) more info... Albion College (ALBC) more info...
- Amway Herbarium (AMWH) more info... Amway Herbarium (AMWH) more info...
- Augustana College (AUGIE) more info... Augustana College (AUGIE) more info...

Scroll down the list of herbaria and check the Indiana University Herbarium box and click the search button in the upper right corner.



STATE UNIVERSITY

Hillsdale College Herbarium (HLS) [more info...](#)

Hope College (HCHM) [more info...](#)

Huntington University Herbarium (HUNT) [more info...](#)

Illinois Natural History Survey (ILLS) [more info...](#)

Indiana University Herbarium, Deam Herbarium (IND) [more info...](#)

Indiana University Southeast Herbarium (JEF) [more info...](#)

J. F. Bell Museum of Natural History Herbarium (MIN) [more info...](#)

Kent State University Herbarium (KE) [more info...](#)

KENT STATE UNIVERSITY

Search >

The Search Criteria page allows users to search by scientific name or common name, by locality at various resolutions (e.g., state, county, or town), latitude & longitude, and collector / date. The search may be further refined so that it may, e.g., include cultivated occurrences.

Our search example will look at a particular species that could have come from one of the Hunt Lists, namely *Viola lanceolata*. As you type the species name into the Taxonomic Criteria box, a drop down list of possible species appears (1). It helps to quickly and accurately choose the desired species.

Note that common names could be used here. Also observe that by default the synonyms box is checked. Thus the search will find specimens filed under alternate names.

Once *Viola lanceolata* has been entered, limit the search to Indiana by typing Indiana into the State/Province box. Then click on List Display (2).

The image shows a screenshot of the Midwest Herbaria website's search interface. At the top, there is a header with the text "Midwest Herbaria" and a decorative image of red flowers. Below the header is a navigation bar with links: Home, Specimen Search, Images, Flora Projects, Interactive Tools, and Crowdsourcing. A user greeting "Welcome Paul!" and links for "My Profile", "Logout", and "Sitemap" are also present.

The main content area is titled "Search Criteria" and includes several sections:

- Taxonomic Criteria:** A checkbox for "Include Synonyms" is checked. The "Scientific Name" dropdown menu is set to "Viola lanceolata".
- Locality Criteria:** Fields for "Country:", "State/Province:", "County:", "Locality:", and "Elevation (in meters):" are present. A dropdown menu is open, showing a list of taxonomic options: "Viola lanceolata", "Viola lanceolata subsp. lanceolata", "Viola lanceolata subsp. occidentalis", "Viola lanceolata subsp. vittata", "Viola lanceolata var. lanceolata", and "Viola lanceolata var. vittata".
- Latitude and Longitude:** Fields for "Latitude:" and "Longitude:" are present.

On the right side of the search criteria section, there are three buttons: "List Display", "Table Display", and "Reset Form". A blue arrow labeled "2" points to the "List Display" button.

A blue arrow labeled "1" points to the dropdown menu in the "Locality Criteria" section, which is shown in a larger, semi-transparent inset window below the main screenshot. This inset window shows the same "Taxonomic Criteria" and "Locality Criteria" sections, with the dropdown menu open and the "List Display" button highlighted.

The resulting Specimen Record page is shown below.










Home >> Collections >> Search Criteria >> **Specimen Records**

Species List Occurrence Records Maps

Dataset: IND
Taxa: *Viola lanceolata*, *Viola lanceolata* subsp. *lanceolata*, *Viola lanceolata* subsp. *occidentalis*, *Viola lanceolata* subsp. *vittata*, *Viola lanceolata* var. *vittata*, *Viola lanceolata* var. *lanceolata*
Search Criteria: Indiana; excluding cultivated/captive occurrences

1 Page 1, records 1-27 of 27

Indiana University Herbarium, Deam Herbarium 2

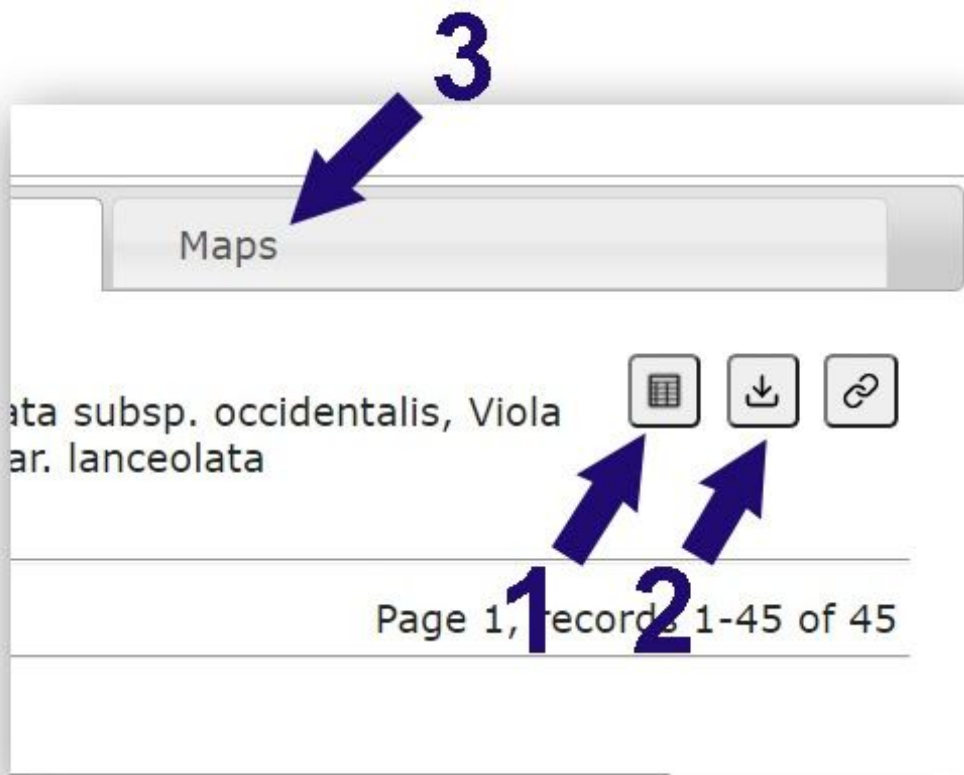
 IND	<i>Viola lanceolata</i> subsp. <i>vittata</i> (Greene) N.H. Russell IND-0072428 Andrew H. Young 8464 1873-04-00 United States, Indiana, Jefferson, Hanover, 38.715565 -85.470138 Full Record Details	 
 IND	<i>Viola lanceolata</i> subsp. <i>lanceolata</i> IND-0072427 Charles C. Deam 38432 1923-05-22 United States, Indiana, White, Penna Railway, 1 mi. east of Reynolds, 40.752475 -86.852541 Full Record Details	 
 IND	<i>Viola lanceolata</i> subsp. <i>lanceolata</i> IND-0072426 Charles C. Deam 56805 1935-09-08	 

Note: 1 = list of synonyms used in the search for *Viola lanceolata*.

2 = an inventory of specimens found by the search. In this case the IU Herbarium is shown to have 27 specimens of *V. lanceolata* from Indiana.

3 = the list of specimens. More details about the specimen are available via “Full Record Details” hyperlink.

And there is more (cont. on next page) ...



Check out these features:

1 = switches to an alternate tabular presentation of the Specimen Records.

2 = an icon for downloading the results as a spreadsheet.

3 = the several tabs extract and summarize additional information from the search. The map tab allows users to generate Google maps that show the location of each georeferenced specimen. Another tab (not shown), the Species List tab, is useful when you have performed a search that uncovers multiple species. For example, you could search by State and County (rather than species). The Species List will generate a downloadable list of the species found by your search.