

Lab 1 – Literature Resource Exercise

Section A.

For each part of this exercise (1-14), each student is assigned one taxon only; i.e. no one has to answer the questions for more than a single taxon. Everyone gets a unique assignment (number). NOTE: for each question list the reference trail you followed and the complete reference of the resources that contained the answer. (If we can't track it, we can't grade it). Use the most recent resources that you can find.

I. For the following plant species common names look up the (1) scientific name, (2) correct author(s), and (3) original citation. If varieties exist choose the first (oldest) listed. Use parenthesis and brackets correctly.

1. Scarlet Gilia
2. Poke Weed
3. Catgut
4. Marrow
5. Sweet Pepperbush
6. Pickerel Weed

II. Given the scientific name of a mammal, recover the following information: (1) original citation; (2) author; (3) year described; (4) higher classification (family and order, in this case).

1. *Dobsonia beauforti*
2. *Maxomys baeodon*
3. *Niviventer coxingi*
4. *Tokudaia osimensis*
5. *Graphiurus rupicola*
6. *Onychogalea lunata*

III. For each genus, list at least two kingdoms to which it belongs. Give (1) both generic authors, (2) dates of publication and (3) higher group name (order or family). Use the oldest published name (for each kingdom) if the generic name was used by more than one author.

1. *Andromeda*
2. *Gracilaria* (*Gracillaria*)
3. *Physa*
4. *Crepis*
5. *Heliophila*
6. *Phania*

IV. Find the most recent combination of the following coleopteran (beetle) species. All have been treated in relatively obscure revisionary studies since 1994. Include the citation where the taxonomic change was made.

1. *Lycocerus nigricollis* Wittmer
2. *Apion gracilitubus* Desbrochers
3. *Sastragceylonensis* Jacoby
4. *Lamprosphaerus amabilis* Leferre
5. *Philonthus lineifrons* Cameron
6. *Hyperaspis hybridula* Crotch

Section B.

1. Visit two on-line searchable, taxonomic databases of your choice, preferably ones that contain taxa in a group you know well or that interests you. (The databases can be of different scope/content.)

A. List the name and URL of each:

B. Contrast briefly (1) the ease of use; (2) the results provided.

2. Visit the TreeBASE website. Search for a taxon of interest to you.

A. Taxon _____

B. How many total studies (all taxa) are currently in TreeBASE? _____

C. How many studies of your taxon are in TreeBASE? _____

3. Visit the Tree of Life and beginning at the ROOT, click through the tree to locate the most terminal (closest to the species group) pages for a taxon of interest or pertinent to your research.

A. The taxon you sought: _____

B. Did it have an information page? Y / N

C. If not, how close did you get, i.e., what was the closest page with appreciable information?

4. Using the Tree of Life website and find out what the sister group of sloths is. Sloths are mammals in the order Edentata.

5. Visit the Missouri Botanical Garden TROPICOS3 database.

A. Search for the following taxon: *Erythroxylum*

B. When and where was this name first published?

C. How many synonyms are there?

D. Answer the same questions for the species *E. coca*.

6. Visit the Index to Organism Names site and search the database for the following taxon: Choreutidae.

A. When was this name first published and who was the author? _____

B. What is the taxonomic hierarchy for this family?

7. Visit Zoological Record (<http://classguides.lib.uconn.edu/content.php?pid=238531&sid=1969144>) and answer the questions below.

A. Who was the author who described *Pauropsalta fuscomarginata*? _____

B. What genus was it transferred to and who were the authors? _____

C. Search for your favorite species and report who described it and in what year. _____

D. Are any synonyms listed? _____

8. The Encyclopedia of Life is an amazing source of information, with a vision to provide global access to information about life on earth. It is a collaborative project that anyone can contribute to, including you. EOL has three stages of curators. You are already qualified to be an Assistant Curator. You can do quite a lot on the site as an Assistant (add text/media, articles and help provide more/better information in general). This will be your task. I would like you to register with the EOL site (it's free, easy, and takes only a few minutes), and update, to the best of your abilities, a page of your choosing. For instance, previous questions asked about a favorite taxon is a possibility. Be creative, have fun, and contribute to a worldwide collaboration for the advancement of earthly knowledge. If you get stuck Dr. Wagner has larval images, hostplant records, and related life history data that would be new to EOL that you can add. Provide me with the page you updated. Take screenshots of the "before and after" and briefly describe what you did. If you feel like modifying more than one page, feel free!