EEMB 149: Mariculture

Step 1: Picking a Topic

These are the three best databases for your research projects (listed in order of importance):

- Aquatic Sciences & Fisheries Abstracts
- BIOSIS (electronic version of Biological Abstracts)
- Agrobase (combined version of AGRIS and Agricola)

One way to decide on a topic would be to conduct an exploratory search on your chosen species. Combine the species with the concepts "**propagation**" or "**cultivation**". Example searches for each database are shown below.

Once you have a list of articles, read the abstracts (article summaries) included in the database to get ideas on how to narrow down your paper topic. Be sure to write down both the common names and scientific names of any species, diseases, parasites, etc.

Example: You decide to investigate "Red Rot" disease in Red Algae (genus Porphyra), which is caused by the fungus Pythium porphyrae.

Now that you have a topic, you are ready to search the databases for the studies you need.

Step 2: Searching the Databases for Articles

Each database has a different interface, but they all are similar. The first thing you should do is make a list of the terms you need to search. Group the synonyms together.

Species	**Problem with Cultivation**
red algae porphyra	red rot pythium porphyrae

In the databases, you will combine synonymous terms with "or" and dissimilar concepts with "and". When you get your results, you will find records that include at least one of the terms for the species AND at least one of the terms for the problem with cultivation.

Links to the databases can be found at http://www.library.ucsb.edu/subjects/biology/eemb.html or at http://www.library.ucsb.edu/eresources/databases/data-frames.html. If you are working from home, you will need to use the VPN or the proxy server. Instructions on how to do that can be found at http://www.library.ucsb.edu/help/offcampus.html.

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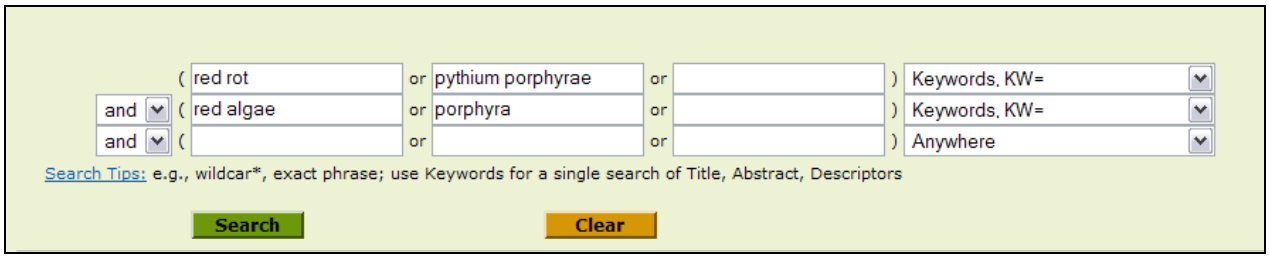
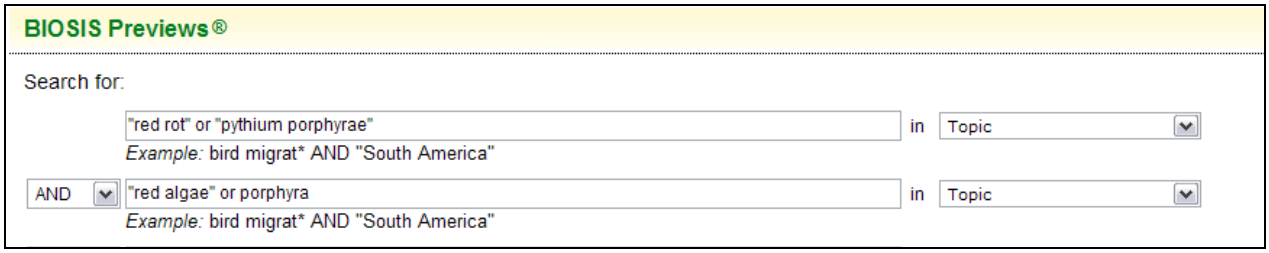
Aquatic Sciences & Fisheries Abstracts (ASFA)

Use the advanced search. Enter synonyms in the same row, and separate concepts on a new row. Be sure to select "Keywords. KW=" in the box at right on <u>all</u> rows.



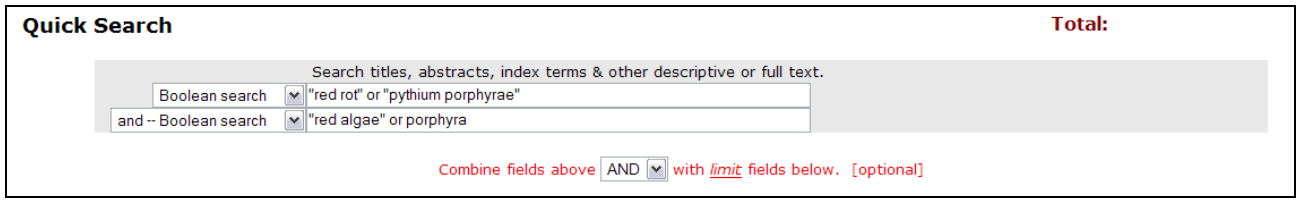
BIOSIS (electronic version of Biological Abstracts)

Use the general search. The quotation marks around the words tell the database to search that concept as a phrase. Make sure to select "Topic" in the box at right on <u>all</u> rows.



Agrobase (combined version of AGRIS and Agricola)

In Agrobase, you will want to group synonyms together on one line (using "or"), and put the second concept on the second line. Be sure to pick "Boolean search" from the list at left.



Step 3: Finding the Articles in the Library or Online

The easiest way to find the articles is to click on the UC-eLinks button next to the citation for the article you want. If we have full-text access to the article online, a link to it will appear first at the top of the UC-eLinks window.

If we do not have electronic access, you will need to look for a paper copy of the journal. You will need to print or jot down the citation for the article before you do this. Then, you will need to find the library call number for the journal.

There are two ways to find the library's call number for a journal:

1. From the UC-eLinks window, click on "Find a Print Copy". This will take you into the Melvyl catalog of what all the UC Libraries own. The records will have the abbreviations for all the UC campuses, so be sure that it says that UCSB owns the journal. Write down the UCSB call number.

2. After retrieving the citation information for your article, go to the Pegasus catalog. It is often easier to do it this way, because Pegasus only records what we own at UCSB and is not as confusing as Melvyl. In Pegasus, do a "Journal title begins with…" search on the title of the journal (NOT the title of the article). If we own the journal, you will be able to find the UCSB call number for it in Pegasus.

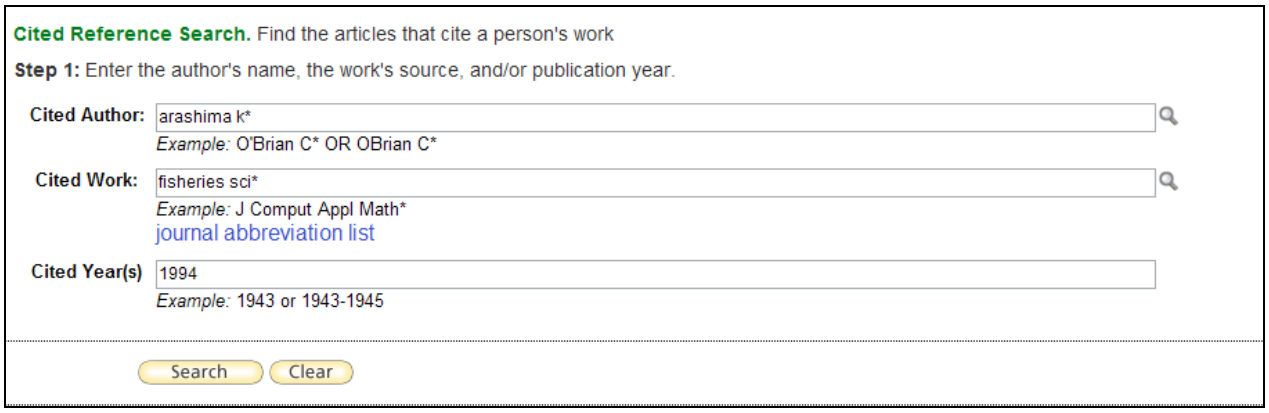
The journals you will be using should be in the Science and Engineering Library on the second floor. If you need help at any time during your research, be sure to ask at the Science Reference Desk which is just across from the central elevators.

Step 4: Finding Additional Studies

If you do not find the required number of studies with your initial database searches, you may need to try another strategy. There are several ways to find additional studies.
One way is to look in the bibliography of an article on your topic. The authors will give you citations to other studies that will be on the same topic. Since you already have a full citation to the article, all you need to do is to find the journal call number in Pegasus (as explained in the previous section).

Another method is to do a cited reference search in the **Web of Science** database. This will help you find articles which cite the article you have found.

Go to the library's "Article Indexes and Databases" page and select "Web of Science" from the list (see http://www.library.ucsb.edu/eresources/databases/data-frames.html). Click on "Cited Reference Search" at the top of the screen.



Use the journal abbreviation list to make sure you list the journal title in the correct format. Then click Search. Next, select the article you're interested in and then click Finish Search. You'll get a list of articles that cite the original article.

Need additional help?

Contact Becky Lasswell at rlasswell@library.ucsb.edu or 805-893-2689.