

CABI Training Materials

Ovid Silver Platter (SP) platform

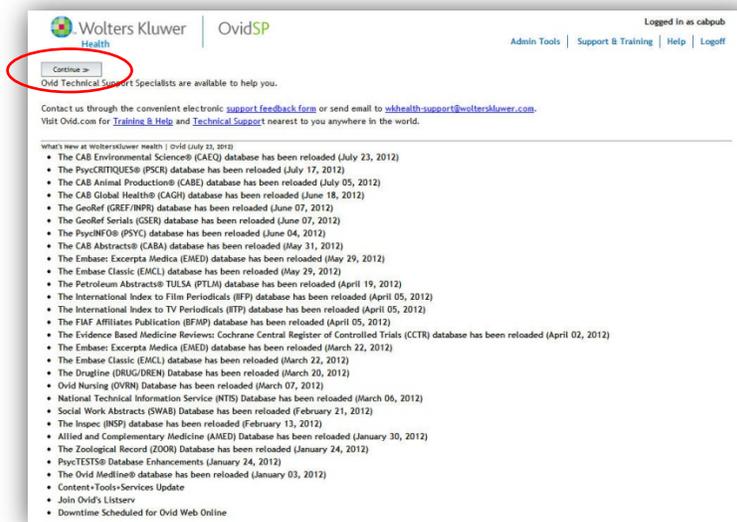
Simple Searching of CAB Abstracts and Global Health

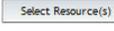
Contents

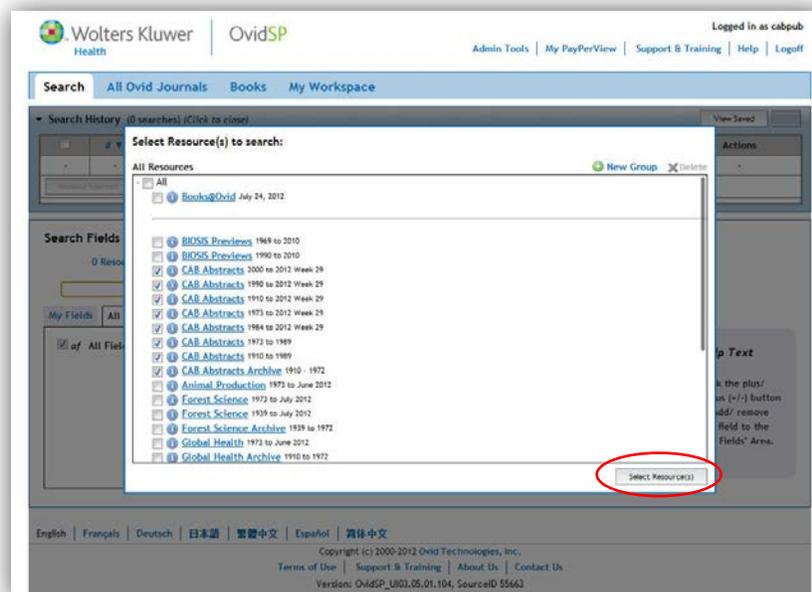
The OvidSP Database Selection Screen	3
The Ovid search screen	4
Basic Search.....	5
How does Basic Search work?	5
What is 'Include Related Terms'?	6
Performing a Basic Search	8
What is 'Relevancy Ranking'?	8
Best Practices.....	9
Basic Search: Summary	10
Refining options after the search	11
Viewing Search Results	13
Managing Search Results.....	14
Output Options.....	14

The OvidSP Database Selection Screen

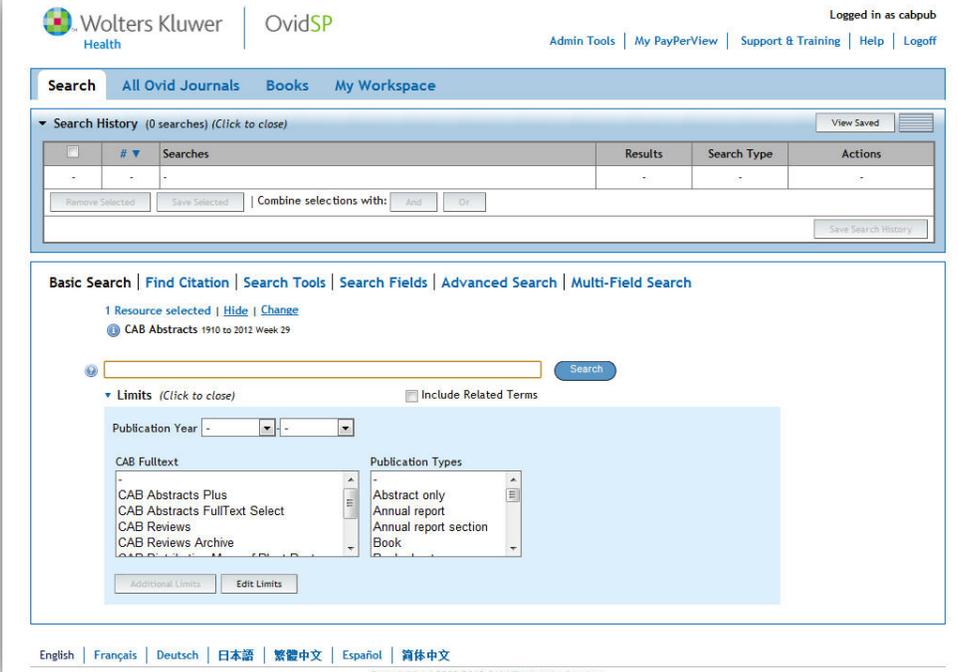
From the OVID home page click the  button seen in the image below



A dialog box will then appear containing the list of databases available to your institution based on your subscription type. Tick the check box of each database you wish to search and then click the  button in the bottom right hand corner of the dialog box.



The Ovid search screen



The screenshot displays the OvidSP search interface. At the top, it shows the Wolters Kluwer Health logo and the OvidSP branding. The user is logged in as 'cabpub'. Navigation links include 'Admin Tools', 'My PayPerView', 'Support & Training', 'Help', and 'Logoff'. The main search area is titled 'Search' and includes tabs for 'All Ovid Journals', 'Books', and 'My Workspace'. Below this is a 'Search History' section with a table showing search results and actions. The 'Basic Search' section is active, featuring a search input field, a 'Search' button, and various filters. The 'Limits' section is expanded, showing 'Publication Year' and 'Publication Types' dropdown menus. The footer includes language options and a copyright notice for Ovid Technologies, Inc.

The previous screen shot shows the OvidSP search page, which offers the user a variety of searching options including **Basic Search**, **Advanced Ovid Search** and **SilverPlatter Search**. **Basic Search** is the default option and is designed for quick and simple searches.

Basic Search

OvidSP's **Basic Search** is a new tool featuring Natural Language Processing (NLP). Natural Language Processing has been designed to retrieve the most relevant results possible from a complete search query. The Basic Search function, using NLP, has been designed to take a complex search query without the need for syntax rules, search conventions, or complicated and redundant search strategies, and return the most appropriate results possible.

A word of Caution:

Whilst the Basic Search option will retrieve highly relevant database records through the use of modern search methods, “behind the scenes” authority files of related terms and sophisticated relevance ranking of search results, it may not always give a true reflection of the complete content of the database being searched. **Basic Search** can severely limit the number of records retrieved. For a comprehensive search, it can often be better to use the more “conventional” search techniques offered by the **Advanced Ovid** and **SilverPlatter Search** modes, both of which are described later in this guide.

How does Basic Search work?

Basic Search has been designed to allow searchers to query OvidSP effectively, using complex search terms written as they might be spoken, in natural language. Generally speaking, three types of queries work best when using **Basic Search**:

1. Groups of individual terms: i.e. a concise expression of a concept

For example

Childhood Obesity America

2. Full query: a question or phrase stated in plain English

For example:

What are the most effective treatments for childhood obesity

3. Copy and paste a title: a variation of one or both of the other query types

For example:

Efficacy of maintenance treatment approaches for child overweight

Basic Search will take the search string, or statement (as in the examples above) and filter out words that are deemed to be irrelevant, or “noise” words, as they are often described. With these words removed, OvidSP can identify concepts and validated terms to search for.

The following table shows the original query, the “noise” words that have been filtered out, and the validated search terms that have been selected by OvidSP.

ORIGINAL QUERY	FILTERED WORDS	VALIDATED TERMS
childhood obesity america		childhood, obesity, america
What are the most effective treatments for childhood obesity	what, are, the, most, for	treatments, childhood, obesity
efficacy of maintenance treatment approaches for childhood overweight	of, approaches, for	efficacy, maintenance, treatment, childhood, overweight

What is ‘Include Related Terms’?

One of the ways that OvidSP’s **Basic Search** helps in the extraction of a relevant set of records, is to allow the searcher to expand upon the original search terms with word variations, strong synonyms and acronyms. Behind the scenes,

OvidSP uses additional word “Authority” files which, like a Thesaurus, list related, alternative words. This powerful strategy removes the need for the redundant searching of like terms. For instance, from our examples above, we can see, in the following table, the validated terms from the original search criteria and the expanded search terms for which OvidSP searches:

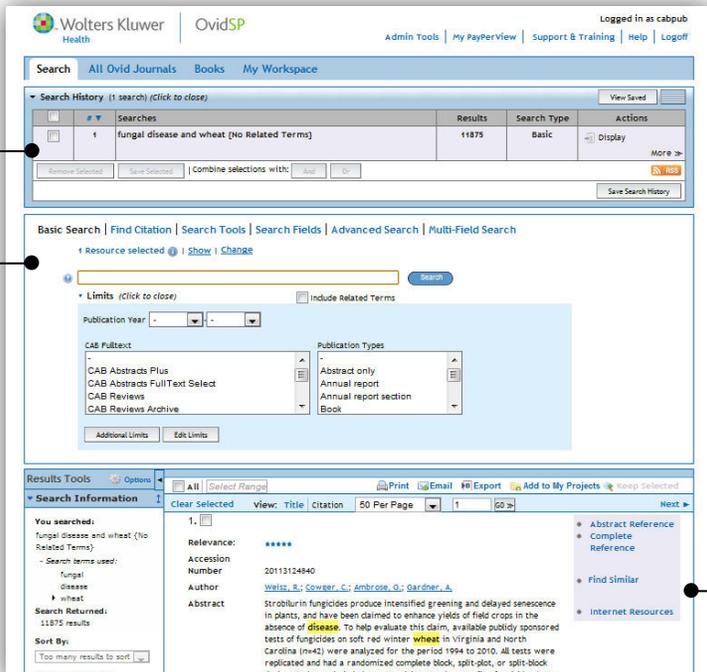
VALIDATED TERMS	EXPANDED TERMS
treatments	treatment, therapy, palliative, relieve, ameliorate, alleviate, therapeutic, relief, therapies, therapeutics, amelioration, relieving, alleviated, alleviation, alleviating, ameliorates, relieves, alleviates, reliefs, management, intervention, cure, treated
childhood	childhood, childhoods, child, children, kid, kids
obesity	adiposes, adiposis, adiposities, adiposity, obesities, overweight, overweights

Use this feature with caution as it can lead to an increased incidence of irrelevant records as the list of “Expanded” or related terms may include terms with more than one meaning or a meaning not related to your chosen search concept. This expanded list of terms can be viewed, after completing the search, by clicking on the arrow next to the keyword listed in the “**Search Aid**” box, to the left of the screen, under the heading “**Your search**”.

Note that, at the time of writing this user guide, OvidSP were using just the Medline Medical Thesaurus so, while this might help in medically related searches, the related terms look-up function will not be so useful in other subject areas.

Performing a Basic Search

To perform a Basic Search, simply enter your search query in either plain text or as a string of important keywords, choose whether you would like to make use of the “**Include Related Terms**” option and, when ready, click the  button.



The screenshot shows the OvidSP search interface. On the left, two labels with arrows point to specific parts of the interface: "Search History" points to the top section showing a previous search for "fungal disease and wheat (No Related Terms)" with 11875 results. "Search box" points to the main search area with a search input field and a "Search" button. On the right, a label "Search Results" points to the results list, which shows a single result with a relevance score of "*****". The result details include the accession number 20113124840, author "Weiss, B.; Sower, C.; Ambrose, G.; Gardner, A.", and a brief abstract about fungicides and wheat senescence.

In addition to the search box, the screen is now showing the Search History display box and the retrieved records in a short display format, ten records at a time. The default option is to display the records in order of “Relevancy”.

What is ‘Relevancy Ranking’?

Searchers who are accustomed to syntax searching, using keywords combined with Boolean operators, are used to seeing results that match their search criteria exactly. While this is often an effective approach, it can often lead to an enormous number of results and, in many cases, many of the records retrieved may not be particularly relevant. In such cases, it can require a number of additional search steps in order to refine the search to obtain the desired results.

In contrast, **Basic Search** has been designed to retrieve the most relevant results, not all results. The way in which OvidSP achieves this is by evaluating certain criteria as follows:

Basic Search: assigns the highest relevancy to results that include all of the validated terms within the original search criteria. For example, from the search in our original example, a record that includes the terms “treatments” “childhood” and “obesity” will have a more profound ranking than a record that only includes “treatments” and “obesity”.

Search Count: How many search concepts appear in the result.

Importance: How rare the terms are in the database. Terms that are rare are given greater weight than more common terms.

Prominence: Where terms appear in a result Terms that occur in the title of a citation are given greater weight than those that occur in descriptor fields or section headings, while those that occur in abstracts are given even less weight.

Frequency: How often the concepts appear in the record.

Fairly self-explanatory; concepts that appear a number of times within a record gain higher ranking than if that same concept appears seldom within the record.

Best Practices

Here are a few tips to help you make the best use of OvidSP's **Basic Search** mode.

- Be mindful of search query types – There are three types of searches that work best:
 1. Group of terms: a concise expression of a concept
 2. Full query: a question or phrase stated in plain, everyday English (free text)
 3. Copy and paste a title: a variation of one or both of the above query types

- Using “**Include Related Terms**” – When you select “**Include Related Terms**”, OvidSP will expand upon the entered search criteria by including synonyms, acronyms and variants of the original term(s).
- State queries concisely - For example, “noise” words detract from the concept: really big ekg changes in highly advanced hypokalemia. Instead, keep it simple: ekg changes in hypokalemia.
- Use nouns more than verbs - Nouns are the natural home for concepts. They are easy to identify and have less ambiguity. There is research supporting the idea that search quality is high when the strategy extracts noun phrases from queries, and this is the approach that Ovid have adapted.
- Do not force phrase searching - Imposing phrase searching, with the use of the hyphen (-) will limit your search to those specific phrases and will prevent OvidSP from expanding on them automatically. For example, in a search for ***weather related damage to sugar cane***, if you force a hyphen in the phrase **weather-related**, you lose all expansions on the word weather because OvidSP perceives the hyphenated phrase as a single term that has no possible expansions.
- Select the spell check option - Use the **Basic Search** spell checker to avoid common spelling errors. In addition, the **Basic Search** tab provides a spell checking option that checks your spelling against all terms in the lexicon and the database.

Basic Search: Summary

- Natural Language or keyword strings.
- Automatic searching of related terms.
- Results ranked by relevance.
- Imposed limit on records retrieved.

Refining options after the search



The screenshot shows a sidebar titled "Results Tools" with a gear icon and "Options" text. It is divided into two main sections: "Search Information" and "Filter By".

Search Information

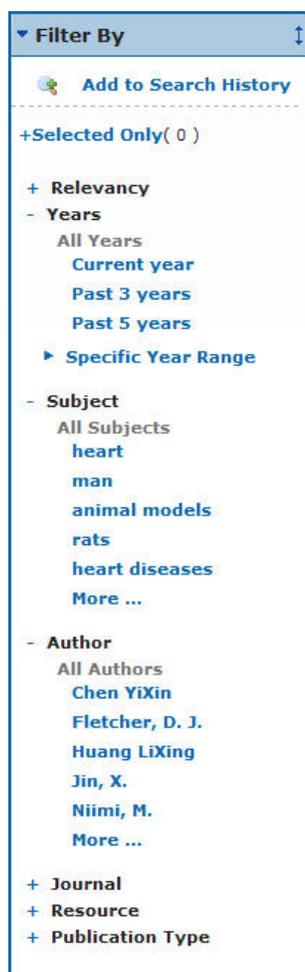
- You searched:** cardiac {No Related Terms}
- Search terms used:* cardiac
- Search Returned:** 22969 results
- Deduplicate
- Sort By:** Too many results to sort (dropdown arrow)
- [Customize Display](#)

Filter By

- [Add to Search History](#)
- +Selected Only(0)
- + Relevancy
- + Years
- + Subject
- + Author
- + Journal
- + Resource
- + Publication Type

The Basic Search mode has been designed as a “simple” search tool. However, a simple search is often not enough, requiring a certain amount of refinement before the required result is reached. With conventional search engines, this refinement often requires the execution of additional searches and the subsequent combination of numerous search results using Boolean operators. Whilst the new OvidSP search interface still allows this, it also offers some additional refine options after the search has been performed to narrow the results. This can be found under the **Results Tools**  **Options**  box situated on the left of the search screen.

At the bottom of the **Research tools** box, the **Filter By** section allows the user to narrow search results by **Relevancy, Years, Subjects, Authors, Journals, Resource** or **Publication type**. By clicking on the **+** to the left of these headings, a drop down list of terms is displayed, as shown in the next screenshot



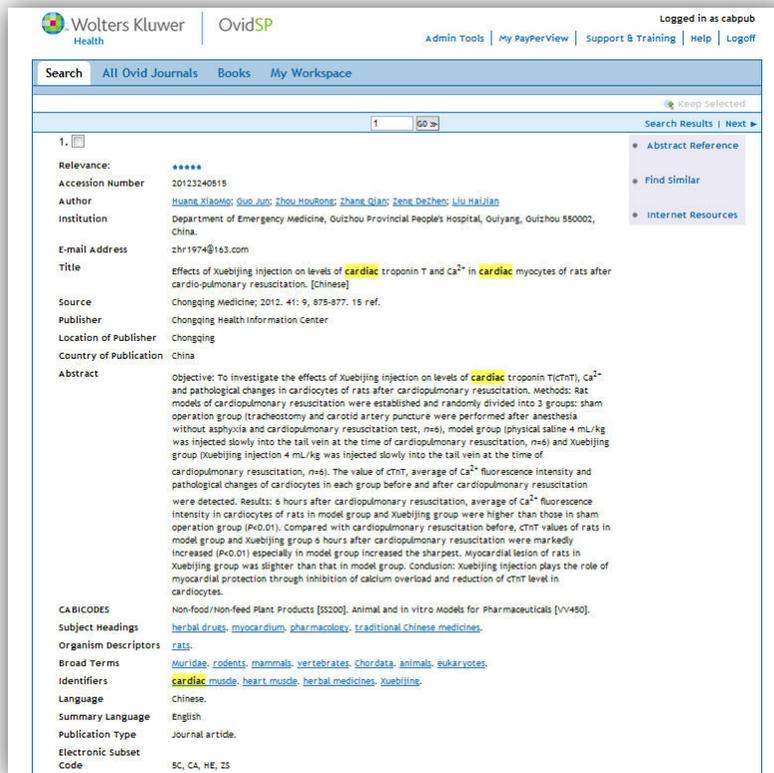
To create these lists, OvidSP has analysed the search results and extracted the top five most frequently occurring entries in the Subject, Author and Journal Title fields of the retrieved records. Next to each entry is shown the number of records, from within the search set, in which the term occurs. For example, the term “Cereals” occurs in the subject field of 407 of the 536 records retrieved.

Clicking on one of these displayed terms, such as “**heart diseases**” will automatically limit your current search to records that contain that term in that field. It effectively combines the selected term with the previous search terms using an “AND” operation, thus narrowing or refining the search.

Viewing Search Results

By default, retrieved records are displayed in a short record format that includes the article title, the author and editor names along with the bibliographic details or citation information. By default, the records are sorted by “Score” or relevance. However, this intermediate display screen allows the records to be resorted according to a number of different criteria. The full range of sort options is available from a drop down list at the top right of the record display window. Simply drop down the list and choose the appropriate sort option.

To view the complete database record, simply click on the [Complete Reference](#) link to the right of each record. As well as providing access to the abstract, this full record display also shows all the additional indexing or metadata that has been applied to the selected record. This metadata has been used to “index” important concepts within the original paper as well as providing additional information such as language of original document, publisher, document type and the address of where the research was done. This metadata can be a valuable source of keywords that can be used to further refine your search. The following screen shows a typical, full database record.



The screenshot shows a full database record in OvidSP. The interface includes a search bar at the top with a search button and a 'Keep Selected' option. The record details are as follows:

- Relevance:** *****
- Accession Number:** 20123240815
- Author:** [Yuan XIAOMI](#); [Guo JIAN](#); [Zhou HOUJIAN](#); [Zhang QIAN](#); [Zeng DaZHEN](#); [Liu HUIJIAN](#)
- Institution:** Department of Emergency Medicine, Guizhou Provincial Peoples Hospital, Guiyang, Guizhou 550002, China.
- E-mail Address:** zhr1974@163.com
- Title:** Effects of Xuebijing injection on levels of cardiac troponin T and Ca²⁺ in cardiac myocytes of rats after cardio-pulmonary resuscitation. [Chinese]
- Source:** Chongqing Medicine; 2012. 41: 9, 875-877. 15 ref.
- Publisher:** Chongqing Health Information Center
- Location of Publisher:** Chongqing
- Country of Publication:** China
- Abstract:** Objective: To investigate the effects of Xuebijing injection on levels of cardiac troponin T (cTnT), Ca²⁺ and pathological changes in cardiocytes of rats after cardiopulmonary resuscitation. Methods: Rat models of cardiopulmonary resuscitation were established and randomly divided into 3 groups: sham operation group (tracheostomy and carotid artery puncture were performed after anesthesia without asphyxia and cardiopulmonary resuscitation test, n=6), model group (physical saline 4 mL/kg was injected slowly into the tail vein at the time of cardiopulmonary resuscitation, n=6) and Xuebijing group (Xuebijing injection 4 mL/kg was injected slowly into the tail vein at the time of cardiopulmonary resuscitation, n=6). The value of cTnT, average of Ca²⁺ fluorescence intensity and pathological changes of cardiocytes in each group before and after cardiopulmonary resuscitation were detected. Results: 6 hours after cardiopulmonary resuscitation, average of Ca²⁺ fluorescence intensity in cardiocytes of rats in model group and Xuebijing group were higher than those in sham operation group (P<0.01). Compared with cardiopulmonary resuscitation before, cTnT values of rats in model group and Xuebijing group 6 hours after cardiopulmonary resuscitation were markedly increased (P<0.01) especially in model group increased the sharpest. Myocardial lesion of rats in Xuebijing group was slighter than that in model group. Conclusion: Xuebijing injection plays the role of myocardial protection through inhibition of calcium overload and reduction of cTnT level in cardiocytes.
- CABICODES:** Non-food/Non-feed Plant Products [55200], Animal and In vitro Models for Pharmaceuticals [V4450].
- Subject Headings:** [herbal drugs](#); [myocardium](#); [pharmacology](#); [traditional Chinese medicines](#).
- Organism Descriptors:** [rats](#).
- Broad Terms:** [Muriidae](#); [rodents](#); [mammals](#); [vertebrates](#); [Chordata](#); [animals](#); [eukaryotes](#).
- Identifiers:** [cardiac muscle](#); [heart muscle](#); [herbal medicines](#); [Xuebijing](#).
- Language:** Chinese.
- Summary Language:** English
- Publication Type:** Journal article.
- Electronic Subset Code:** SC, CA, HE, ZS

On the right side of the record, there are links for 'Abstract Reference', 'Find Similar', and 'Internet Resources'.

Managing Search Results

After the search has been completed, and all the refinements made, a final manual selection can be made. A check box is provided to the left of each record which allows selected records to be “Marked”. These records are then added to a “Marked List” which can later be displayed and output. This can be a useful tool for anyone performing a lot of searches who wants to output their selected records in one output operation at the end of a search session. To do this simply add the records to the Marked List as you go, and output them at the end of your session.

Output Options

OvidSP offers a wide range of output options, all available from the menu at the top bar of the results section.



The following output options can be performed on selected records through:

Print

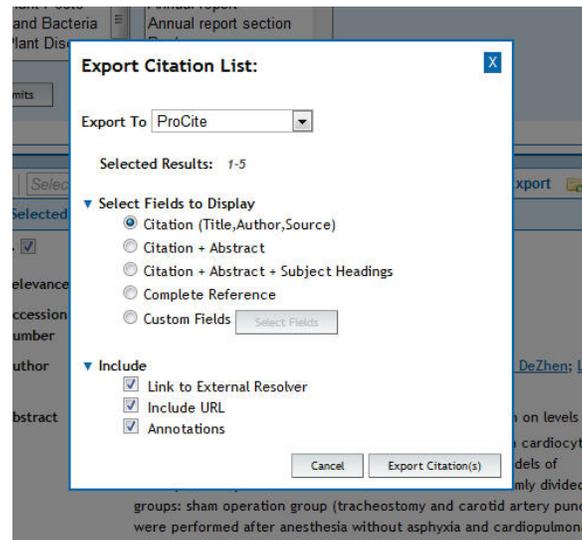
E-mail

Export to specific document/software

Saved as Project folder

Saved to history searches

Each export method has a relevant output options for the records. All will require you to **Select Fields to Display to** choose the data fields that you want exported as in the screenshot below of the dialog box.



Next, choose the format or layout for the output. The default is OvidSP HTML format, but a variety of other options are available.

The next thing to do is to decide which records to output from the **Results** panel. If you have Marked any records, the default option is to output **Selected Results**. This will output all the records in your Marked List.

You are now ready to output your records by choosing the appropriate option from the **Actions** panel at the top of the **Results Manager**.

The following screenshot shows the Results Manager and the various output options it offers, including a Primary and Secondary Sort facility at the bottom.

Additional features to use with Basic Search

Above, we have looked at some of the techniques involved in a simple search using the **Basic Search** mode. Two other useful functions of OvidSP are the “**Limit**” function and the **Search History** screen

Limit a search

After entering your search statement, you can set a range of limits on your search before executing it. To set limits, click on the **Limits** button just below the search box. This will open the **Limits** selection screen, shown below, which offers five options:

Abstracts – limits to records with Abstracts.

Latest Update – limits to the latest month's records added to the database.

English Language – limits to records from original articles written in English.

Full Text – limits to records with links to Full Text original articles.

Publication Year – limits publication date of the original article.

[Basic Search](#) | [Find Citation](#) | [Search Tools](#) | [Search Fields](#) | [Advanced Ovid Search](#) | [SilverPlatter Search](#)

fungal diseases wheat

Check Spelling Include Related Terms

▼ Limits (Click to close)

Abstracts English Language Full Text
 Latest Update

Publication Year - -

Note, in Basic Search, the **Additional Limits** button is greyed out, and can't be used. This function is only available in **Advanced Ovid** and **SilverPlatter Search** modes.

Once you have entered your search statement, and set the limits, click the **Search** button to execute the search.

Search History:

[Basic Search](#) | [Find Citation](#) | [Search Tools](#) | [Search Fields](#) | [Advanced Ovid Search](#) | [SilverPlatter Search](#)

Check Spelling Include Related Terms

▼ Limits (Click to close)

Abstracts English Language Full Text
 Latest Update

Publication Year - -

▼ Search History (3 searches) (Click to close)

<input type="checkbox"/>	#	Searches	Results	Display
<input type="checkbox"/>	1	fungal diseases wheat (Including Related Terms)	536	<input type="button" value="DISPLAY"/>
<input type="checkbox"/>	2	1 and "plant pathogenic fungi" [Subjects]	372	<input type="button" value="DISPLAY"/>
<input type="checkbox"/>	3	from 2 keep 1, 3-4, 7, 9-10	6	<input type="button" value="DISPLAY"/>

| Combine selections with:

The Search History screen lists the individual searches that have been run during the current session. It shows the search statement used and the number of records retrieved. Clicking on the “Display” link, to the right of any of the searches, will result in a display of the associated records in the record display window. This panel can also be used to combine searches together as a means of refining your search results. To combine searches, simply check the box to the left of required search statements, choose either the AND operator (to Narrow your search) or the OR operator (to expand it). Clicking on the chosen operator will execute the search. There is, however, a word of caution here. Because of the record limitation imposed by the Basic Search Mode, the use of the Search History screen, for combining searches, may lead to misleadingly low results or even zero results. To make use of this functionality, you should consider using the **Advanced Ovid** or **SilverPlatter Search** modes.

Advanced Ovid and SilverPlatter Search Modes:

The final section of this “Simple Guide to searching CAB Abstracts with OvidSP” will look at some basic search techniques using the **Advanced Ovid** and **SilverPlatter Search** modes.

Unlike **Basic Search**, these two search options use the more conventional search technique of searching for keywords and phrases which can be combined, when necessary, to form what is referred to as a Search Statement using Boolean Operators (**AND**, **OR** and **NOT**). This is sometimes known as “syntax searching” and can be very powerful.

To perform such an “advanced” search, important words or phrases are selected from the original search question and are searched for either individually, one at a time, or combined into a single search statement using one or more Boolean operator. Irrelevant or inconsequential words, often referred to as “stop words”, should be excluded from the search as they have no conceptual meaning and would result in the retrieval of irrelevant records.

The basic techniques used for this type of search are the subject of a separate user guide entitled “An Introduction to Searching”, which can be downloaded from the CABI Web site at:

www.cabi.org/datapage.asp?iDocID=598.

This type of searching is very powerful and precise, but does require the searcher to think of all the possible variations of the chosen keywords and to build up what can sometimes be a complex search statement. **Advanced Ovid** and **SilverPlatter Search** do not allow Natural Language Processing or automatic Related Term searching.

A simple Search:

The two search screens for **Advanced Ovid** and **SilverPlatter Search** are slightly different in appearance, reflecting their earlier origins, but the method of searching is the same for both search modes.

The Advanced Ovid search screen

Basic Search Find Citation Search Tools Search Fields **Advanced Ovid Search** SilverPlatter Search

Enter **Keyword** or phrase (use "" or "\$" for truncation): Keyword Author Title Journal

Map Term to Subject Heading

▼ **Limits** (Click to close)

Abstracts English Language Full Text

Latest Update

Publication Year - -

The SilverPlatter Search screen

Basic Search Find Citation Search Tools Search Fields **Advanced Ovid Search** **SilverPlatter Search**

Enter a keyword or phrase. Use "" or "\$" for truncation.

▼ **Limits** (Click to close)

Abstracts English Language Full Text

Latest Update

Publication Year - -

To search for a keyword, simply type the term in the **Keywords:** box and click the **Search** button. The search will be executed and the records that are retrieved will be displayed in the “Results” section at the bottom of the screen.

Wolters Kluwer | OvidSP

Database Field Guide | Display Knowledge Base | Help | Logout

Change Database | Saved Searches/Alerts | PayPerView Account | View Cart

Current: CAB Abz

Basic Search | Find Citation | Search Tools | Search Fields | **Advanced Ovid Search** | SilverPlatter Search

Enter Keyword or phrase (use "" or "\$" for truncation):

Keyword Author Title Journal
 Map Term to Subject Heading

Limits (Click to close)
 Abstracts English Language Full Text
 Latest Update
 Publication Year: -

Search History (1 search) (Click to expand)

Search Aid

Your search
Search terms used:
cattle

Narrow search
Narrow your results by:
 Subjects
 Authors
 Journals

Results Manager

Actions
 DISPLAY
 PRINT PREVIEW
 EMAIL
 SAVE

Results
 Selected Results
 All on this page

Customize Display/Reset Display Sort By: too many results to sort Results Per Page: 10

Results of your search: **cattle mp. [mp=abstract, title, original title, broad terms, heading words]**

Viewing 1-10 of 522217 Results

Go to #:

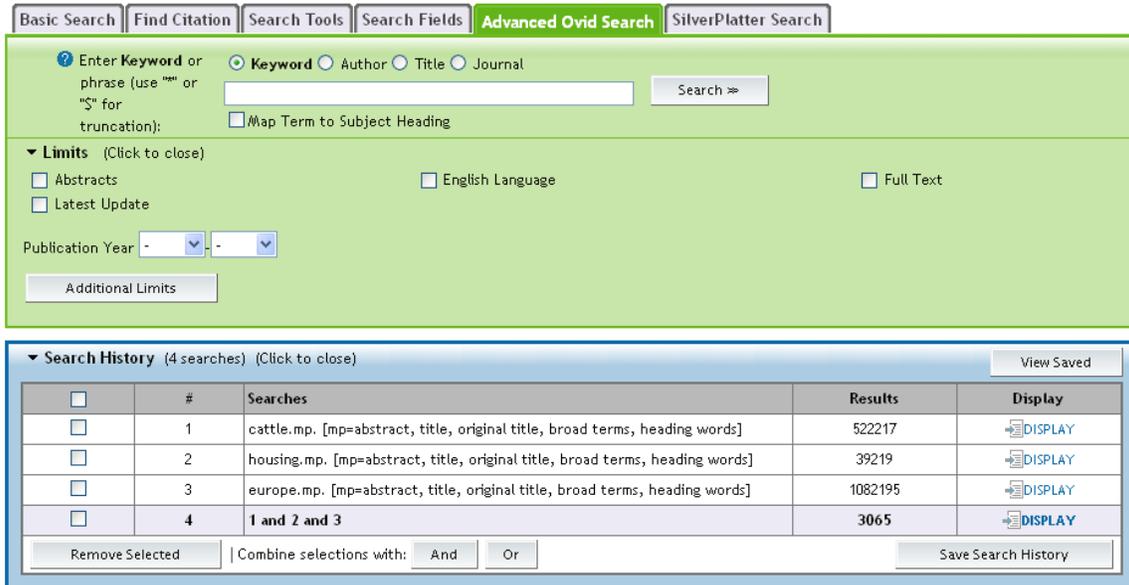
- Voznenkova, B. Kobet, M. Klimes, F. Cermak, B. Placnikova, V. On the occurrence of powdery mildew in meadow pearlar (*Leptopyrenaea l.*) [Journal Article] *Grasunde Pflanzen. Springer-Verlag GmbH, Heidelberg, Germany*: 2007. 59: 4, 179-182. 4 ref. Abstract Complete Reference
- Fukkwanruk, T. Rungruang, S. Choothesa, A. Wensing, T. Performance of pregnant dairy cows fed alfalfa hay in total mixed ration: a field trial in Thailand. [Journal Article] *Kasetsart Journal, Natural Sciences. Kasetsart University, Bangkok, Thailand*: 2008. 42: 1, 11-18. 11 ref. Abstract Complete Reference
- Shalhar, P. Haguq, S. Thang, BK Singh, SK Shea, MC Meteorological correlates of FMD in Jharkhand State. [Journal Article] *Journal of Research, Birsa Agricultural University, Birsa Agricultural University, Ranchi, India*: 2007. 19: 1, 139-140. 6 ref. Abstract Complete Reference

Done Internet

OvidSP Tip

Search Aid provides options to further narrow or refine a search by the most frequently occurring Subjects, Authors, or Journals.

For searches involving more than one term, the simplest way to search is to search each keyword separately, create a set of records for each and then combine searches together at the end, using the **Search History** display and the “Combine selections with” option, as shown in the following example for records about Cattle Housing in Europe (Cattle AND Housing AND Europe):



Basic Search Find Citation Search Tools Search Fields **Advanced Ovid Search** SilverPlatter Search

Enter **Keyword** or phrase (use "" or "\$" for truncation): Keyword Author Title Journal Map Term to Subject Heading

▼ **Limits** (Click to close)

Abstracts English Language Full Text

Latest Update

Publication Year - -

▼ **Search History** (4 searches) (Click to close)

<input type="checkbox"/>	#	Searches	Results	Display
<input type="checkbox"/>	1	cattle.mp. [mp=abstract, title, original title, broad terms, heading words]	522217	<input type="button" value="DISPLAY"/>
<input type="checkbox"/>	2	housing.mp. [mp=abstract, title, original title, broad terms, heading words]	39219	<input type="button" value="DISPLAY"/>
<input type="checkbox"/>	3	europe.mp. [mp=abstract, title, original title, broad terms, heading words]	1082195	<input type="button" value="DISPLAY"/>
<input type="checkbox"/>	4	1 and 2 and 3	3065	<input type="button" value="DISPLAY"/>

| Combine selections with:

Here we have executed three searches for the keywords **Cattle**, **Housing** and **Europe**. The drop-down Search History screen shows the three searches. By “checking” the three boxes to the left of each search, to select the search, we can combine the three searches together by clicking the **AND** button. This operation has executed an “AND” search, resulting in 3,065 records which contain all three words. The **AND** operation narrows, or refines, the search while using the **OR** operator expands the search, resulting in a larger set of records.

Searching Multi-Terms:

Once you have mastered single keyword searching, you can try creating multi-term search statements. This is where you enter more than one term at a time in the Search box and, at the same time, combine them with one or more Boolean



Operator (**AND, OR, NOT**). With experience, this can save a lot of time. Our search for Cattle Housing in Europe could be searched more simply as one search statement, as shown below:

Basic Search Find Citation Search Tools Search Fields **Advanced Ovid Search** SilverPlatter Search

Enter **Keyword** or phrase (use "" or "\$" for truncation): Keyword Author Title Journal

Map Term to Subject Heading

▼ **Limits** (Click to close)

Abstracts English Language Full Text

Latest Update

Publication Year - -

Basic Search Find Citation Search Tools Search Fields **Advanced Ovid Search** SilverPlatter Search

Enter **Keyword** or phrase (use "" or "\$" for truncation): Keyword Author Title Journal

Map Term to Subject Heading

▼ **Limits** (Click to close)

Abstracts English Language Full Text

Latest Update

Publication Year - -

▼ **Search History** (5 searches) (Click to close)

<input type="checkbox"/>	#	Searches	Results	Display
<input type="checkbox"/>	2	housing.mp. [mp=abstract, title, original title, broad terms, heading words]	39219	<input type="button" value="DISPLAY"/>
<input type="checkbox"/>	3	europe.mp. [mp=abstract, title, original title, broad terms, heading words]	1082195	<input type="button" value="DISPLAY"/>
<input type="checkbox"/>	4	1 and 2 and 3	3065	<input type="button" value="DISPLAY"/>
<input type="checkbox"/>	5	(cattle and housing and europe).mp. [mp=abstract, title, original title, broad terms, heading words]	3065	<input type="button" value="DISPLAY"/>

| Combine selections with:

As you can see, from the last screen shot, the result is the exactly the same. The only noticeable difference is the way in which the search history is displayed.

Using more than one Operator:

In the above, multi-term search example, we used only one operator; the AND operator. However, in many searches, you may want more than one operator as in the example 'production of sheep or cattle'. Here the keywords are:

Production, Sheep and Cattle

What we actually want to search for is the **Production of Sheep or Cattle**

The search statement could be typed in one of two ways:

Production AND Sheep OR Cattle

or

Sheep OR Cattle AND Production

When searching for multiple terms, combined with more than one operator, we have to be careful how we type them. The search system can only perform one combine operation at a time, and it needs to know which one to do first. Does it do the **AND** first or does it do the **OR** first? Different search systems use different rules. The OvidSP interface applies the “left-to-right” rule. In our first example above, it would combine **Production AND Sheep** and then combine this result with **OR Cattle** to produce the final result:



▼ Search History (1 search) (Click to close) View Saved				
<input type="checkbox"/>	#	Searches	Results	Display
<input type="checkbox"/>	1	((production and sheep) or cattle).mp. [mp=abstract, title, original title, broad terms, heading words]	546409	DISPLAY

Remove Selected | Combine selections with: Save Search History

This is the **WRONG** result. What the search has given us are all the records that contain the two words **Production** and **Sheep** plus all the records that contain the word **Cattle**. What we actually wanted was all the records that contain either the word **Sheep** OR the word **Cattle** (or both together) AND the word **Production**. We needed to perform the **Sheep OR Cattle** operation first. There are two ways of making sure that the operations are performed in the correct order. One is to make sure that the terms are typed in to the Search box in the correct “Left-to-right” order:

Sheep OR Cattle AND Production

The other way is to put round brackets around the operations that you want performed first:

Production AND (Sheep OR Cattle)

With more complex search statements, like in the following example, you may have several keywords and several different operations that need to be

performed in the right order. You can even use multiple levels of brackets where the operation surrounded by the most brackets is done first:

((Production OR Breeding) AND (Sheep OR Cattle)) NOT Disease\$

The two **OR** operations are enclosed by two sets of brackets, and will be done first, the **AND** operation has one set of brackets around it, and will be done second, and the **NOT** operation, with no brackets, will be performed last.

Truncation

Note, in the last example, we have used the \$ sign at the end of the keyword Disease. This is known as “truncation” and is a useful way to search for multiple terms that start with the same stem such as plurals. Another example would be Nutrition\$ which would search for Nutrition, Nutritional, Nutritionally, Nutritionist, and Nutritionists.

Exporting Records

With both **Advanced Ovid** and **SilverPlatter Search** modes, the output and refine options are the same as for Basic Search mode, as described earlier.