

**CABI Training Materials**

**AgBiotechNet**

**User Guide**

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## Introduction



AgBiotechNet is the complete agricultural biotechnology information service that can help you to find international literature on genetic engineering, molecular genetics and tissue culture of plants and animals. AgBiotechNet gives rapid access to agricultural biotechnology and biosafety information. The site hosts information that maps and mirrors the latest research developments in key areas of agricultural biotechnology – giving the content a real research currency. Coverage includes:

- Animal reproduction
- Biosafety
- Genetic engineering/modification
- Plant and animal genes and genomics
- Plant and animal pathogens and diseases
- Plant reproduction
- Plant tissue culture

AgBioTechNet includes the following information materials:

*Abstracts records:* Indexed records from the CAB Direct database relating to the subject of agricultural biotechnology science

*Full text articles:* Links to the complete scientific record for scholarly articles hosted on the CAB Direct database

*CAB Reviews:* Comprehensive overviews and detailed reviews of the latest research on an area of scientific study

*News Articles:* News on the current developments in agricultural biotechnology written by subject experts

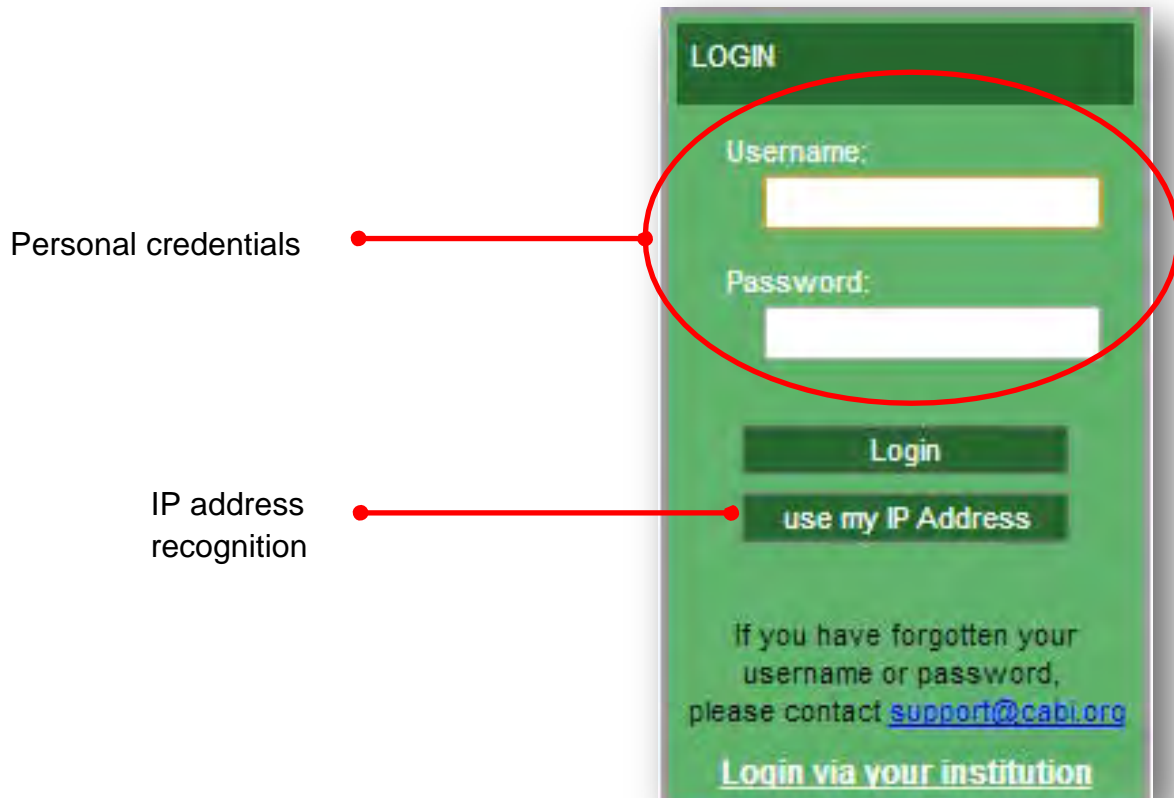
*Events:* A calendar of relevant international conferences, congresses, annual meetings and more targeting scientific communities and industries involved in agricultural biotechnology

The following guide has been designed for all users of AgBiotechNet to highlight various features available and enable our customers to easily navigate the interface. It will also introduce various search techniques for new users of online databases and explain various strategies that can be used when searching to return the most relevant results.

## Accessing the database

AgbioTechNet is a web-based interface. To access the database visit [www.cabi.org/agbiotechnet](http://www.cabi.org/agbiotechnet)

There are two ways to login to the database:



### By personal credentials:

If you requested access to the database by a username and password please enter this in to the login box situated in the top left hand corner of the webpage.

### By IP Address:

If your institution has a subscription to the database and you are accessing through your institutions network, the database will recognise your IP address as a registered user and automatically log you on to the database.

If you aren't automatically recognised click the  button.

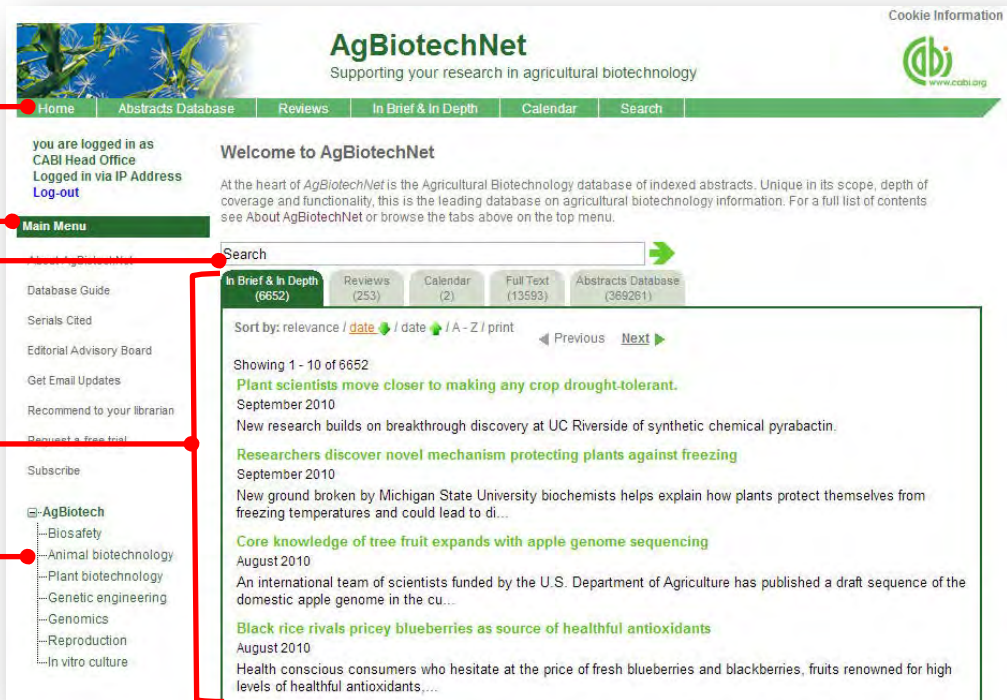
### Troubleshooting

If you are having access problems to the database please contact our support team on [cabi.support@marston.co.uk](mailto:cabi.support@marston.co.uk)

## Navigating the interface

The AgBiotechNet interface has been designed to enable quick and comprehensive content searches.

Below shows an image of the AgBiotechNet homepage and the various features displayed.



The screenshot shows the AgBiotechNet homepage with several key features highlighted by red lines and labels:

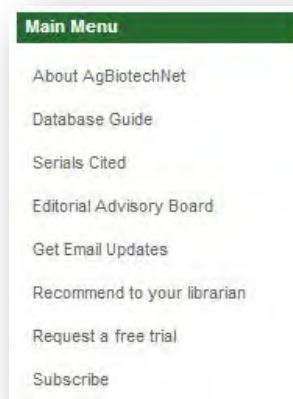
- Top bar menu:** Located at the top of the page, containing links for Home, Abstracts Database, Reviews, In Brief & In Depth, Calendar, and Search.
- Main menu:** A vertical menu on the left side of the page, listing various support and feedback options.
- Search box:** A search input field with a green arrow button, located below the top bar menu.
- Results box:** The main content area displaying search results, including a list of articles with titles and dates.
- Browse functions:** A section on the left side of the results box, listing various biotechnology categories.

### Top Bar Menu

The top bar menu provides access to both predefined pages for specific content contained in the database and links to CABI related products.

### Main Menu

The Main Menu options allow users to access the support and feedback aspects of the site. These include:



The Main Menu options are listed below:

- About AgBiotechNet
- Database Guide
- Serials Cited
- Editorial Advisory Board
- Get Email Updates
- Recommend to your librarian
- Request a free trial
- Subscribe

*About AgBiotechNet:* Find out further product information such as types of content, vital statistics and a full list of subjects covered

*Subject coverage:* Provides a detailed list of subjects areas covered by the database and indexed material.

*Editorial Team:* Browse members of our editorial team that influence the subject coverage and future direction for the internet resources


*Serials cited:* A list of all the cited serials for all scientific literature indexed in the database

*Recommend to you librarians/*

*Request a free trail/ Subscribe:* These are viewable features for people who are not currently CABI customers. It allows the visitor to send a notification to their librarian, request a free trial or send an enquiry email for more subscription information

## Browse functions



The browse menu provides an expandable list of broad subject areas behind which are hidden pre-built site searches. Simply expand the subjects using the  icon and choose a subject of your choice from the list by clicking on the link. This runs the search across the whole of AgBiotechNet using a pre-defined search string to return results relevant to that subject area.

## Conducting simple site searches

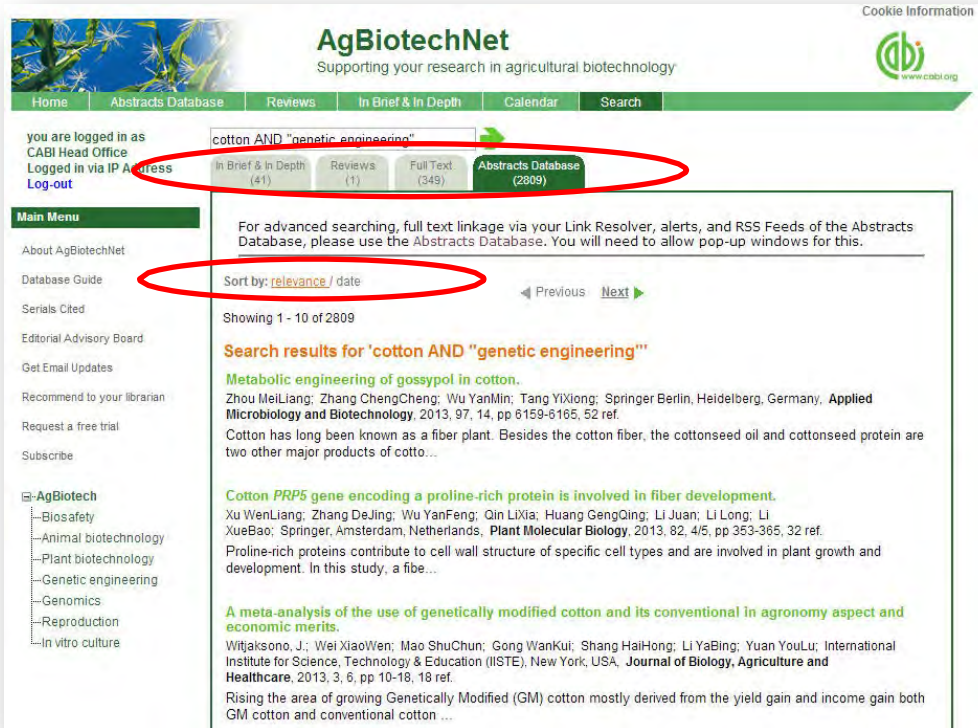
AgBioTechNet offers a simple site search using a variety of basic search techniques to search content across the whole of the database. The table below shows the various basic search techniques that can be used:



Search technique	Example	Description	Function	Reason to use
<b>Single word search</b>	<input type="text" value="cotton"/> →	Searches the database using a single word term	Returns a broad range of results for a particular word/topic	Provides a broad overview of a scientific area of interest
<b>Boolean search</b>	<input type="text" value="cotton AND genetic engineering"/> →	Searches the database using the operators AND, OR and NOT	Performs searches on multiple concepts that provides specific keyword searching for an area of interest that can include or exclude other concepts.	Allows the user to conduct more controlled searching. Can be used to omit homophones
<b>Phrase searching</b>	<input type="text" value='cotton AND "genetic engineering"'/> →	Use quotation marks before and after a multiple word phrase	Returns results only containing the entire phrase	Narrows searching to records that only contain the whole phrase
<b>Parentheses</b>	<input type="text" value='(cotton AND "genetic engineering") AND (France OR Spain)'/> →	Searches the database using keywords, Boolean operators and parentheses.	Used for searches that contain multiple Boolean operators to define the correct search logic	Refines searches with Boolean operators further to provide limited search results
<b>Wild cards</b>	<input type="text" value='(cotton* AND "genetic engineering") AND (France OR Spain)'/> →	Uses the symbols * and ? in keyword search	Using the * returns results with different word stems for the root word  Using the ? symbol allows users to specify unknown characters	The * allows users to broaden results to keywords with differing word stems e.g. pop* = popular, population, etc.  The ? returns results using a keyword that may differ in spelling



## Organizing results display


The returned search results are displayed in the results box. By clicking on the various tabs from the tabular menu at the top of the results box you can browse the results by material type. The darker coloured tab indicates the type of results that are currently displayed.

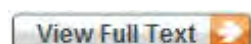


Additionally, you can sort the display of records by their publication date, their relevancy or an alphabetical list by title. Additionally there is the option to print a list of search results for future reference. To do this click on the relevant icon from the menu [relevance / date](#)  [date](#)  [A - Z](#) / [print](#) as indicated above

The results box shows the article header for each record. The type of bibliographic information displayed in the article header may vary depending on the type of material viewed but generally will include:

- Record title
- Authors
- Author affiliation
- Journal title
- Date of publication
- Location data (i.e. journal number, page number)
- Leading sentence of the article

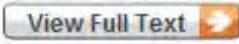
If CABI hosts the full text article of the record also displayed will be the [View Full Text](#)  button. Click this link through to a PDF of the full text article.

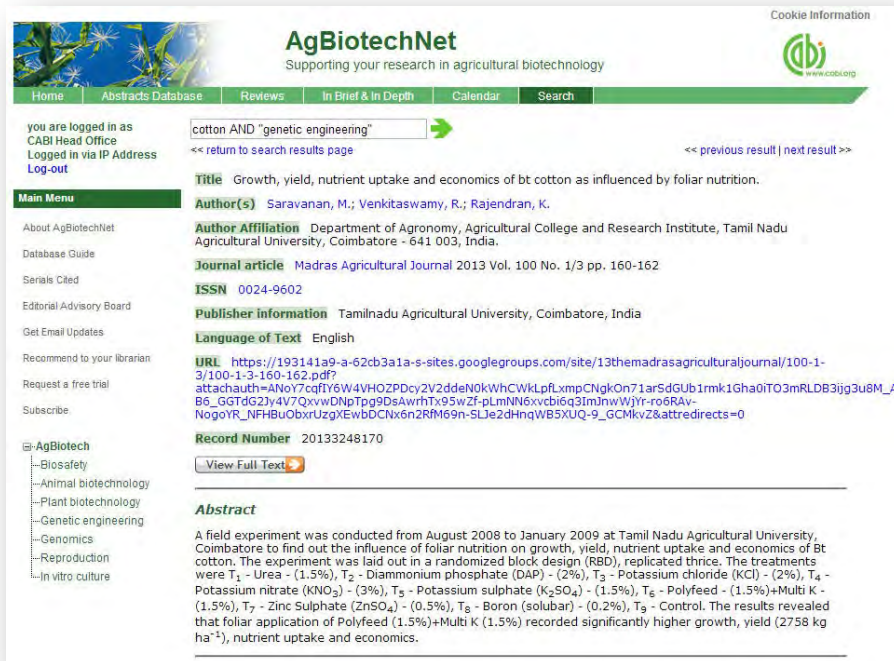




## Viewing records

To view the full details of the abstract record click on the green title from the article header in the results box. This will direct you to the individual record page where the complete bibliographic information is listed including the full abstract summary (see example below).


Again the  is also displayed on this page if the full text article is available.



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Home | Abstracts Database | Reviews | In Brief & In Depth | Calendar | Search

you are logged in as CABI Head Office  
Logged in via IP Address  
Log-out

Search: cotton AND "genetic engineering" 

<< return to search results page >> << previous result | next result >>

**Title** Growth, yield, nutrient uptake and economics of bt cotton as influenced by foliar nutrition.

**Author(s)** Saravanan, M.; Venkataswamy, R.; Rajendran, K.

**Author Affiliation** Department of Agronomy, Agricultural College and Research Institute, Tamil Nadu Agricultural University, Coimbatore - 641 003, India.

**Journal article** Madras Agricultural Journal 2013 Vol. 100 No. 1/3 pp. 160-162


**ISSN** 0024-9602

**Publisher information** Tamilnadu Agricultural University, Coimbatore, India

**Language of Text** English

**URL** [https://193141a9-a-62cb3a1a-s-sites.googlegroups.com/site/13themadrasagriculturaljournal/100-1-3/100-1-3-160-162.pdf?attachauth=ANoY7cqfY6W4VHOZPDCy2V2ddeNokWhCWkLpfxmpCNgkOn71arSdGub1rmk1Gha0IT03mRLDB3jg3u8M\\_AB6\\_GGTdG2jy4V7QxwDNPpTg9DsAwrhT95wZF-plmNN6xvcbi6q3m3mWwJ1r-ro6RAV-NogoYR\\_NFHbuObxrUzqXEwbDCNx6n2RfM69n-SLJe2dhngWB5XUQ-9\\_GCMkv2&attredirects=0](https://193141a9-a-62cb3a1a-s-sites.googlegroups.com/site/13themadrasagriculturaljournal/100-1-3/100-1-3-160-162.pdf?attachauth=ANoY7cqfY6W4VHOZPDCy2V2ddeNokWhCWkLpfxmpCNgkOn71arSdGub1rmk1Gha0IT03mRLDB3jg3u8M_AB6_GGTdG2jy4V7QxwDNPpTg9DsAwrhT95wZF-plmNN6xvcbi6q3m3mWwJ1r-ro6RAV-NogoYR_NFHbuObxrUzqXEwbDCNx6n2RfM69n-SLJe2dhngWB5XUQ-9_GCMkv2&attredirects=0)

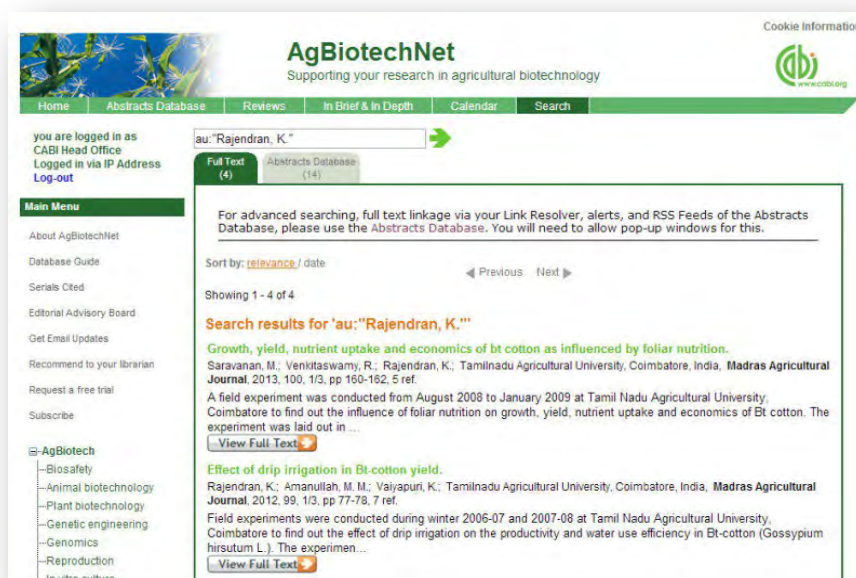
**Record Number** 20133248170



**Abstract**

A field experiment was conducted from August 2008 to January 2009 at Tamil Nadu Agricultural University, Coimbatore to find out the influence of foliar nutrition on growth, yield, nutrient uptake and economics of Bt cotton. The experiment was laid out in a randomized block design (RBD), replicated thrice. The treatments were T<sub>1</sub> - Urea - (1.5%), T<sub>2</sub> - Diammonium phosphate (DAP) - (2%), T<sub>3</sub> - Potassium chloride (KCl) - (2%), T<sub>4</sub> - Potassium nitrate (KNO<sub>3</sub>) - (3%), T<sub>5</sub> - Potassium sulphate (K<sub>2</sub>SO<sub>4</sub>) - (1.5%), T<sub>6</sub> - Polyfeed - (1.5%)+Multi K - (1.5%), T<sub>7</sub> - Zinc Sulphate (ZnSO<sub>4</sub>) - (0.5%), T<sub>8</sub> - Boron (solubar) - (0.2%), T<sub>9</sub> - Control. The results revealed that foliar application of Polyfeed (1.5%)+Multi K (1.5%) recorded significantly higher growth, yield (2758 kg ha<sup>-1</sup>), nutrient uptake and economics.


As you can see from the example above some of the bibliographic information is displayed as blue. For example in the Author field [Rajendran, K.](#) is displayed. This different colour text indicates a hyperlink is associated to the keyword so that when clicked it runs a further search for that keyword limited to its associated field. This can be useful to find more relevant content, such as articles written by the same author as shown in the example below.



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Search: au:"Rajendran, K." 

Full Text (4) | Abstracts Database (14)

For advanced searching, full text linkage via your Link Resolver, alerts, and RSS Feeds of the Abstracts Database, please use the Abstracts Database. You will need to allow pop-up windows for this.

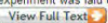
Sort by: [relevance](#) / date << Previous Next >>

Showing 1 - 4 of 4

**Search results for 'au:"Rajendran, K."'**

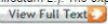
**Growth, yield, nutrient uptake and economics of bt cotton as influenced by foliar nutrition.**  
Saravanan, M.; Venkataswamy, R.; Rajendran, K.; Tamilnadu Agricultural University, Coimbatore, India. *Madras Agricultural Journal* 2013, 100, 1/3, pp 160-162, 5 ref.

A field experiment was conducted from August 2008 to January 2009 at Tamil Nadu Agricultural University, Coimbatore to find out the influence of foliar nutrition on growth, yield, nutrient uptake and economics of Bt cotton. The experiment was laid out in ...




**Effect of drip irrigation in Bt cotton yield.**  
Rajendran, K.; Amanullah, M. M.; Vairapuri, K.; Tamilnadu Agricultural University, Coimbatore, India. *Madras Agricultural Journal* 2012, 99, 1/3, pp 77-78, 7 ref.

Field experiments were conducted during winter 2006-07 and 2007-08 at Tamil Nadu Agricultural University, Coimbatore to find out the effect of drip irrigation on the productivity and water use efficiency in Bt-cotton (*Gossypium hirsutum* L.). The experimen...




For our News and Reviews record pages we also include a Related items section which can be found on the right-hand side of the page as displayed below. This link provides users with a predefined search string which performs a search to return records that are related to the current record being viewed.



## AgBiotechNet

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Logged in via IP Address  
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**Main Menu**

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- [In vitro culture](#)

**Researchers discover novel mechanism protecting plants against freezing**  
C Sousa Correia  
[Source] Michigan State University  
01 September 2010

***New ground broken by Michigan State University biochemists helps explain how plants protect themselves from freezing temperatures and could lead to discoveries related to plant tolerance for drought and other extreme conditions.***

"This brings together two classic problems in plant biology," said Christoph Benning, MSU professor of biochemistry and molecular biology. "One is that plants protect themselves against freezing and that scientists long thought it had something to do with cell membranes, but didn't know exactly how.

"The other is the search for the gene for an enigmatic enzyme of plant lipid metabolism in the chloroplasts," in other words, how lipids, which are membrane building blocks, are made for the plant cell organelles, which are responsible for converting solar energy into chemical energy by photosynthesis.

In an article published the Journal Science (published online 26 August 2010), Benning and his then-doctoral degree candidate Eric Moellering and technical assistant Bagyalakshmi Muthan describe how a particular gene leads to the formation of a lipid that protects chloroplast and plant cell membranes from freeze damage by a novel mechanism in *Arabidopsis thaliana*. Working on his dissertation project under Benning supervision, Moellering identified a mutant strain of *Arabidopsis* that can not manufacture the lipid and linked this biochemical defect to work done by others who originally described the role of the gene in freeze tolerance, but did not find the mechanism.

"One of the big problems in freezing tolerance or general stress in plants is that some species are better at surviving stress than others," Moellering said. "We are only beginning to understand the mechanisms that allow some plants to survive while others are sensitive."

There is no single mechanism involved in plant freezing tolerance, Moellering added, so we can not say that these findings will lead any time soon to genetic breakthroughs making citrus or other freezing-intolerant plants able to thrive in northern climates. But it does add to our understanding of how plants survive temperature extremes.

**Related Items**

[Search site for these related items](#)

[freezing AND tolerance AND drought](#)

## Advanced searching

### Field searching

The search box for the AgBiotechNet also allows users to conduct advanced field searching using the index field tags.

Field searching is a technique by which users can search for keyword terms in specific indexing fields. These indexing fields are used when adding a bibliographic record to CABI's database e.g. Abstract title, author. Each indexing field has an associated field tag which can be used in conjunction with search keywords to return a more precise set of results. Below is a list of the indexing fields and their associated tag:


#### Common search fields


Description	Field Tag
Article title	title
Author	author
Abstract	ab
Author affiliation	aa
Descriptor	de
Organism Descriptor	od
Geographic Locator	gl
Broad term	up
Identifier	id
Subject term	subject
Publication source	do
Publisher	publisher
CABICODE	cc
Conference	ct
Language	la
Publication type	it
Year	yr
Record number	pa
DOI	oi
ISSN	sn
ISBN	bn

#### Additional search fields

Description	Field Tag
Additional Authors	ad
Author Affiliation	aa
CAS Registry Numbers	ry
Conference Dates	cd
Conference Title	ct
Corporate Author	ca
Country of Publication	cp
Descriptors	de
Digital Object Identifier	oi
Document Editors	ed
Document Title	do
Email	em
English Item Title	et
Non English Item Title	ft
Geographic Location	gl
Identifiers	id
ISBN	bn
ISSN	sn
Item Type	it
Language(s) of Summary	ls
Language(s) of Text	la
Location of Publisher	lp
Main Abstract	ab
Organism Descriptors	od
Pan Number	pa
Personal Author	au
Personal Author Variants	av
Publisher	pb
CABI Product Code	sc
Up-posted Descriptors	up
Web URL	ur
Year of Publication	yr

To conduct a field search type the associated field tag (must be lowercase) into the search box followed by a colon. Next enter your search term/s. Field searching can also be conducted using the variety of simple search techniques outlined previously such as multiple word searches and Boolean operators. Below show some examples as shown in the examples below:

Single word search:  

Multiple word search:  

Searching with parentheses:  

To conduct advanced searches or to access other advanced features users can access the CAB Direct platform.

## Accessing CAB Direct

Subscribers to AgBioTechNet also have access to the CAB Direct interface for advanced functionality. Please note this only gives access to the database subset that your institution has access to. For example, if your institution is only subscribed to AgBioTechNet you will only have access to the records indexed for the AgBioTechNet database. Advanced features that can be accessed on the CAB Direct platform include:

*Advanced Searches:* The complex search power of the CAB Direct search engine allows users to conduct complex searches and refine results by field type

*Saving and combining searches:* MyCABDirect allow users to save commonly used search strings for easy reference. The combine features also allows users to refine records performed across two searches.

*Selecting and saving records:* Mark and save records for future reference or export, print or share selections

*Alerts and RSS feeds:* Create automatic e-alerts or RSS feeds from your saved searches for weekly updates of the latest research

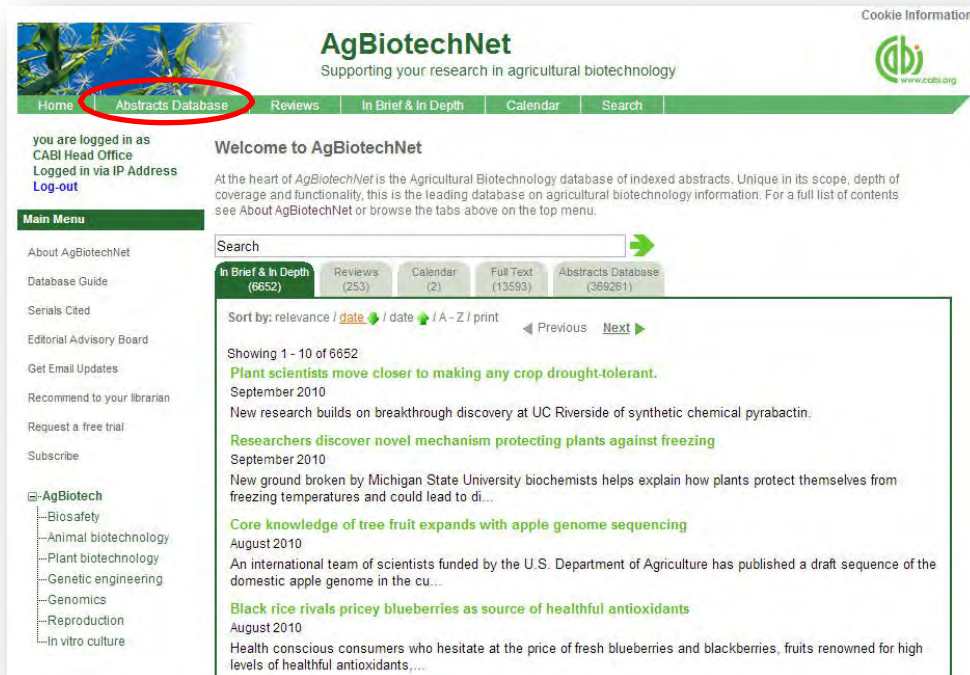
*Export options:* Export records to a reference management software or download as selected articles as MARC records

*Integrated full text linkage:* Integrate your full text holdings listed in your library catalogue via your Link Resolver



There are two ways to access the CAB Direct platform from the AgBioTechNet platform. Either:

1. Click on the **Abstracts Database** button in the top menu



2. Click on the Abstracts tab of the and select the Abstracts database link (shown below)



The CAB Direct search interface is also the subject of separate more advanced set video tutorials and user guides. For more information on how to perform these advanced features visit the [CAB Direct user guide](#).

## Database pages

As mentioned previously the top bar menu provides access to predefined pages for specific content contained in the database and links to CABI related products and related sites as shown in the diagram below:



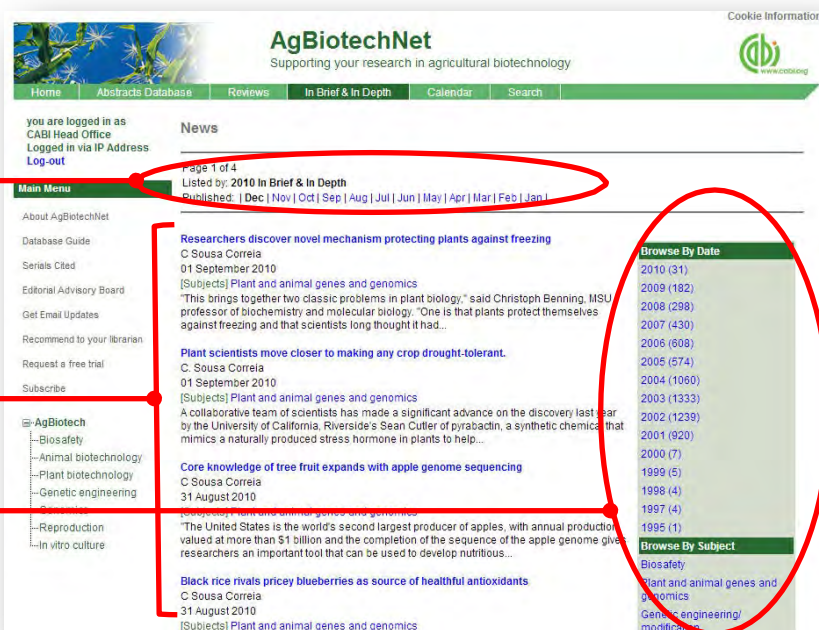
Each database page has features and display for easy navigation. These include:

*Search box:* This conducts a search across the whole site

*Content display:* Shows content available displayed by most recent

*Browse options:* Refine content by subject categories or year of publication.

*Date refine:* Refine content by publication month



The screenshot shows the AgBiotechNet website with the following annotations:

- Date refine:** A red circle highlights the month selection dropdown menu in the 'Listed by: 2010 In Brief & In Depth' section.
- Content display:** A red circle highlights the list of article titles and abstracts in the main content area.
- Browse options:** A red circle highlights the 'Browse By Date' and 'Browse By Subject' filters on the right side of the page.