



- Draft -

Online Information Service  
for Non-chemical Pest Management in the Tropics  
[www.oisat.org](http://www.oisat.org)

# User's Manual

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Hamburg, 2005

## **Pesticide Action Network (PAN)**

Founded in 1982, the Pesticide Action Network is an international coalition of over 600 citizens groups in more than 60 countries, working to oppose the misuse of pesticides and to promote sustainable agriculture and ecologically sound pest management.

PAN Germany was established in 1984 as part of this global network and has continually been involved in initiatives to reduce the use of hazardous pesticides and to promote sustainable pest management systems on national, European and global levels.

## **Acknowledgements**

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© Pesticide Action Network (PAN) Germany  
Nernstweg 32, 22765 Hamburg, Germany  
Phone: +49 (0) 40 – 399 19 10-0  
Fax: + 49 (0) 40 – 390 75 20  
Email: [info@pan-germany.org](mailto:info@pan-germany.org)  
Internet: [www.pan-germany.org](http://www.pan-germany.org)

Editor: Dr. Jewel Bissdorf  
Layout: Reginald Bruhn

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# User's Manual



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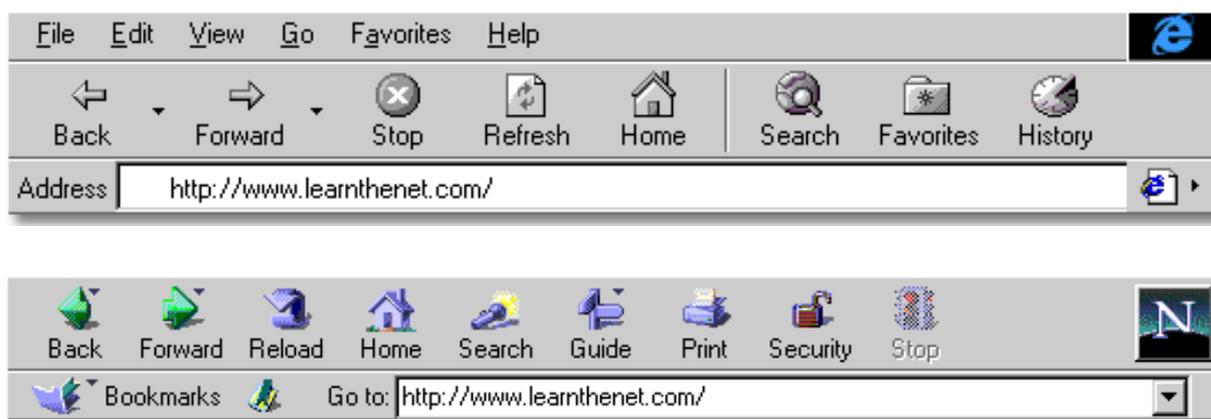




## The www Browser

When you first launch your web browser (e.g. Internet Explorer, Netscape, Modzilla, and others) usually by 'double-clicking' on the icon on your desktop, a predefined web page appears. This page is referred to - as your Home page or Start page. With Navigator for instance, you may be taken to Netscape's NetCenter or to a page selected by your Internet service provider. (If you want however, you can easily change your start page.)

## The Toolbar



The row of buttons at the top of your web browser is called the Toolbar. It helps you travel through the web of possibilities while keeping track of where you have been. Since the toolbars for Navigator and Internet Explorer differ slightly, we will first describe what the buttons in common do:

- The **Back** button returns you the previous page you have visited
- Use the **Forward** button to return to the page you just came from
- The **Stop** button stops the browser from loading the current page
- **Reload** or **Refresh** as the name implies, loads the web page again
- **Home** takes you to whichever home page you have chosen. If you have not selected one, it will return you to the default home page, usually the Microsoft or Netscape website
- **Search** connects to directories and search tools on the Microsoft or Netscape websites
- **Print** lets you make a hard copy of the current page loaded in your browser
- **Bookmarks** or **Favorites** lets you record the addresses of websites you want to revisit.
- The **Location Bar** – just under the **Toolbar**, you will see a box labeled "Go To," or "Address." This is where you have to write the address of OISAT website that you now want to browse.

## The OISAT web page

### Getting Started

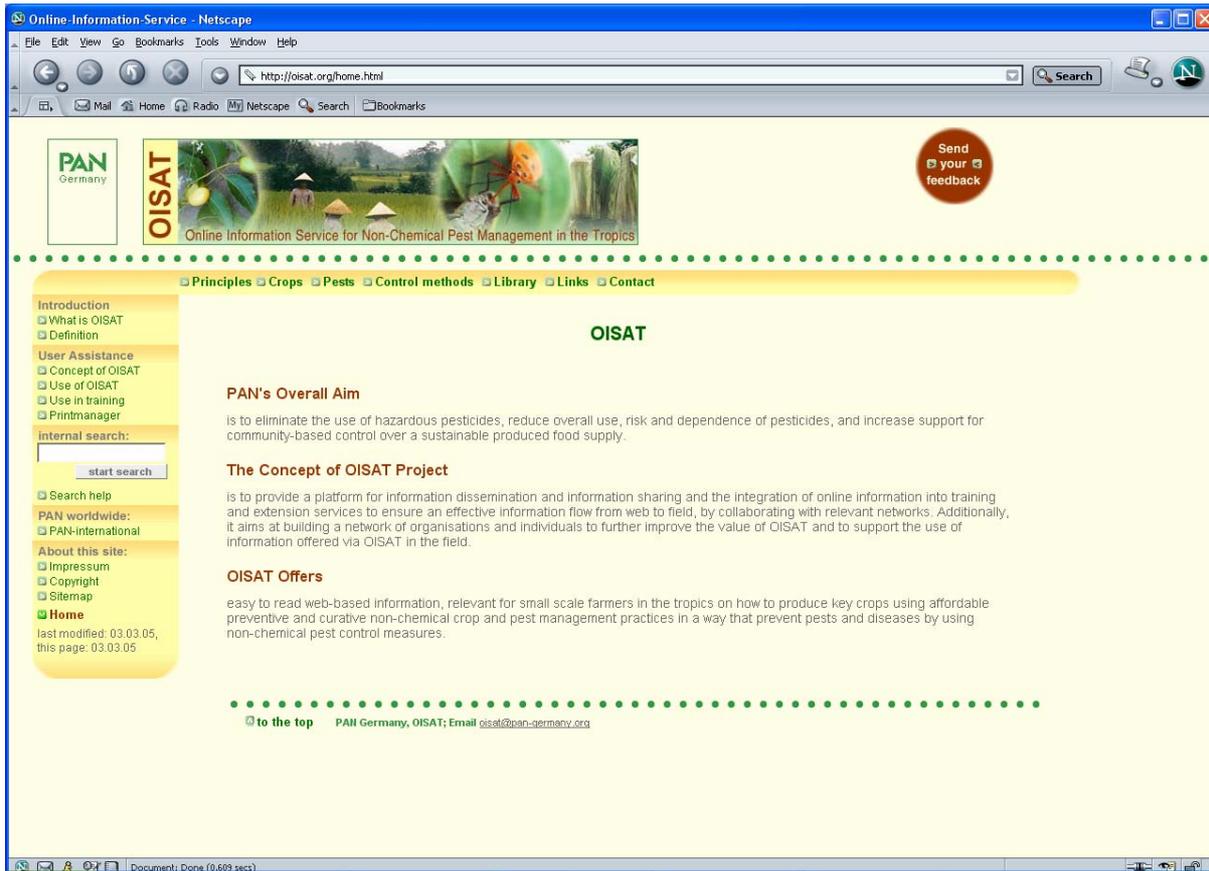
Type [www.oisat.org](http://www.oisat.org) at the **Location bar** "Go To," or "Address" to enter OISAT web!

This is the route to OISAT, through which you can access online information on non-chemical pest management to start addressing problems on pests and plant health.

## Finding the OISAT home page

Point your browser to the Location bar where you typed [www.oisat.org](http://www.oisat.org). Press 'Enter' on your keyboard to take you to the OISAT homepage.

## The OISAT homepage



## The structure of OISAT

### Navigation Bars

The OISAT homepage shows you buttons both at the horizontal rows and at the vertical columns.

At the Horizontal Navigation Bar, the row buttons will guide you on the general information that are related to natural pest management practices that include the following:

- Crops: With the help of a “Crop-Pest Matrix” the key pests of major crops are indicated for the different growth stages and plant parts throughout the cropping season. When clicking on the pest associated with a certain crop stage and plant part, the visitor gets to the page where the pest and its preventive and curative management is described.
- Pests: A second entry point to pest management methods is through Pests. In case the visitor is not certain of the species, visual descriptions of major categories of insect pests are presented by using icons. The major pest categories we have identified are caterpillars, beetles, hoppers, soft-bodied insects, flies, termites/ants, and very small. Under the name of the category and the icon, we find the names of the pests described. When clicking on these, the description of the pest will open with a picture.
- Control methods: To get information directly on a certain control method, the visitor can enter this category.
- Library: In this section, direct access to full-text documents is provided. The documents are divided into user-friendly categories.
- References: In this section, the external web links are presented.

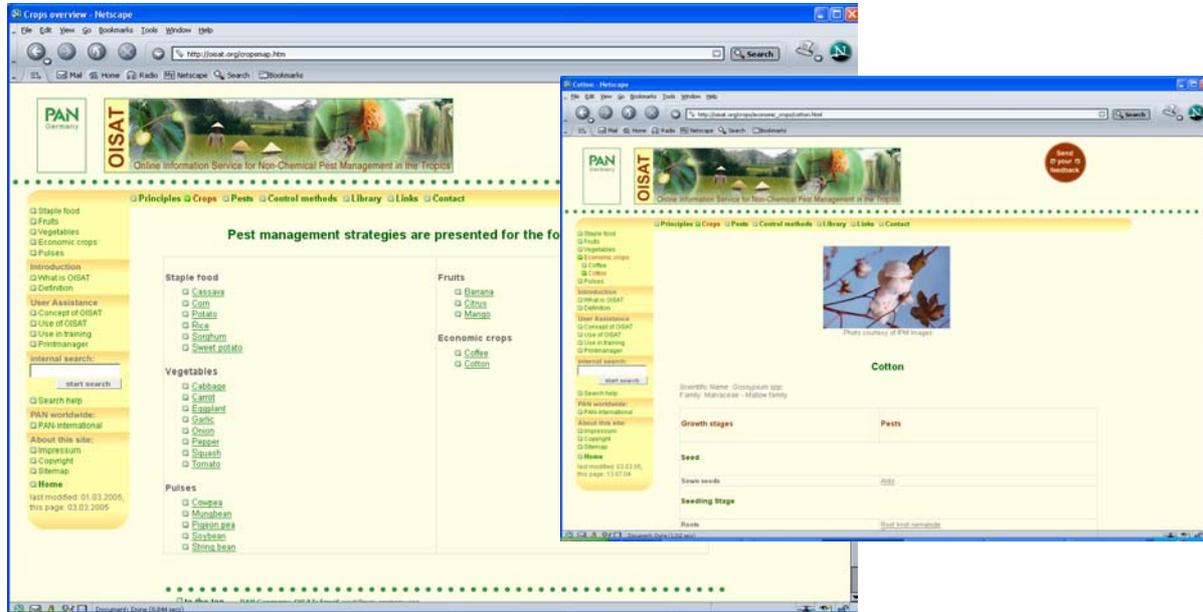
At the Vertical Navigation Bar, the column buttons will inform you of the general information of what OISAT project is all about, its uses, the persons and organizations involved, and the fair use of its content. Furthermore, it provides the following information:

- OISAT Info is introduced and the term “Non-chemical Pest Management” is defined.
- User Assistance is being given, by outlining the structure and principles of OISAT Info. Under this point, information is also given on how OISAT can be used and on how it can be integrated into training and extension activities.
- The search function, specific information can be located easily.
- The print manager assists on how the specific information can be downloaded and saved so that these can be edited and put together into training material in a printed version.
- The international network of PAN can be accessed directly and general information on the Site is provided.

**To display the information about each feature, move your mouse over the button on your screen and ‘double click’ it.**

## The Crop Structure

By 'double clicking' the  [Crops](#) button and the desired crop, you will be directed at these sites

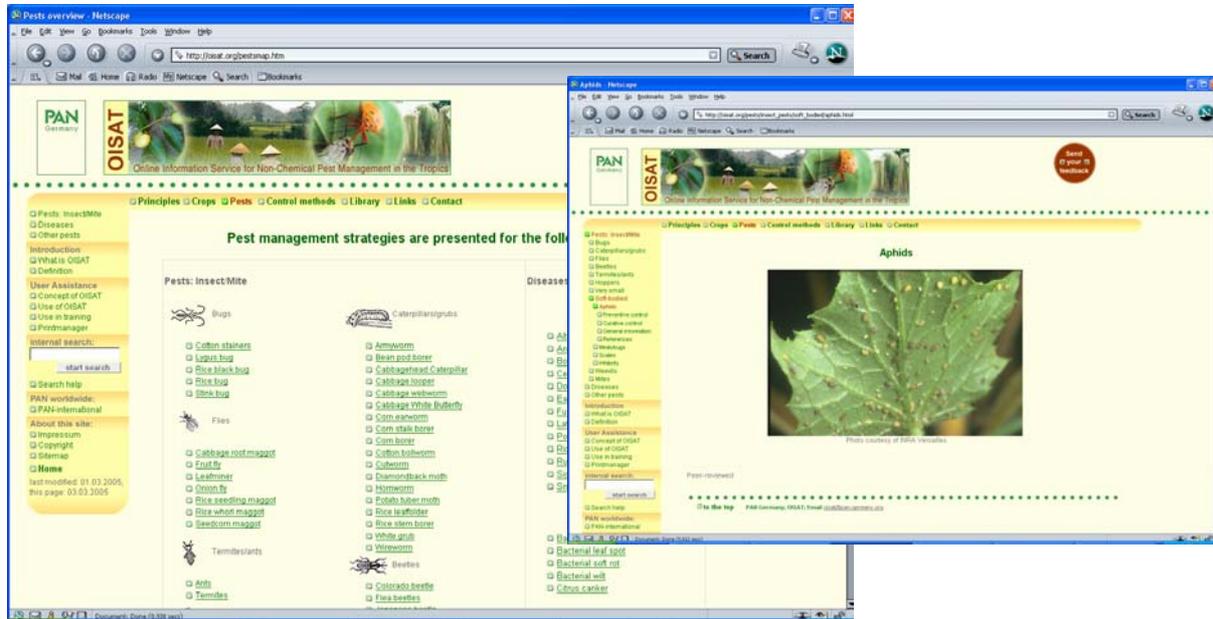


The crop structure includes the following information; staple crops, vegetables, pulses, fruit trees, economic crops have the following subcategories:

1. Plant growth stages and its pests - the various growth stages, starting from seedling stage up to the maturation stage are shown and correspondingly are the various pests attacking at a certain growth stage. You can immediately go to the web page containing a certain pest that you want to know, by 'double clicking' the pest's name located at the second column of the table- directly opposite at the plant's part.
2. Agro-ecology - is the community of plants and animals interacting with their physical environment that has been modified by humans to produce food, fibre, fuel, and other products for their consumption and income generation. A farm that is utilised for agricultural production is a complex system in which ecological processes found under natural conditions occur. Nutrient cycling, predator-prey interactions, competition, symbiosis and other activities happened. By understanding these ecological relationships and processes, agro-ecosystems can be manipulated to improve production and to produce more sustainably, with fewer negative environmental or social impacts and fewer external inputs. This section provides agro-ecological information to the likelihood of pest and disease occurrence and helps improve the design of the farming system and the appropriate preventive measures.
3. Recent development - the current studies and researches conducted as regards to new cultivars, natural pest control methods, and other IPM strategies, etc.

## The Pest Structure

By 'double clicking' the  [Pests](#) button and the desired insect pest you will be directed at these pages;



The pest structure includes the following information; Insects/Mites; Slugs/Snails, and Rodents have the following subcategories:

1. Name of the pest - with photo
2. Preventive control - natural enemies (parasites, predators, and pathogens) and cultural practices (field sanitation, crop rotation, trap crop, green manuring, composting, mulching, etc.), and plant monitoring including the threshold level
3. Curative control - plants in pest control, physical methods, microbials, other solutions, and other methods
4. General information - host plants, distribution, damage, and description
5. References and external links

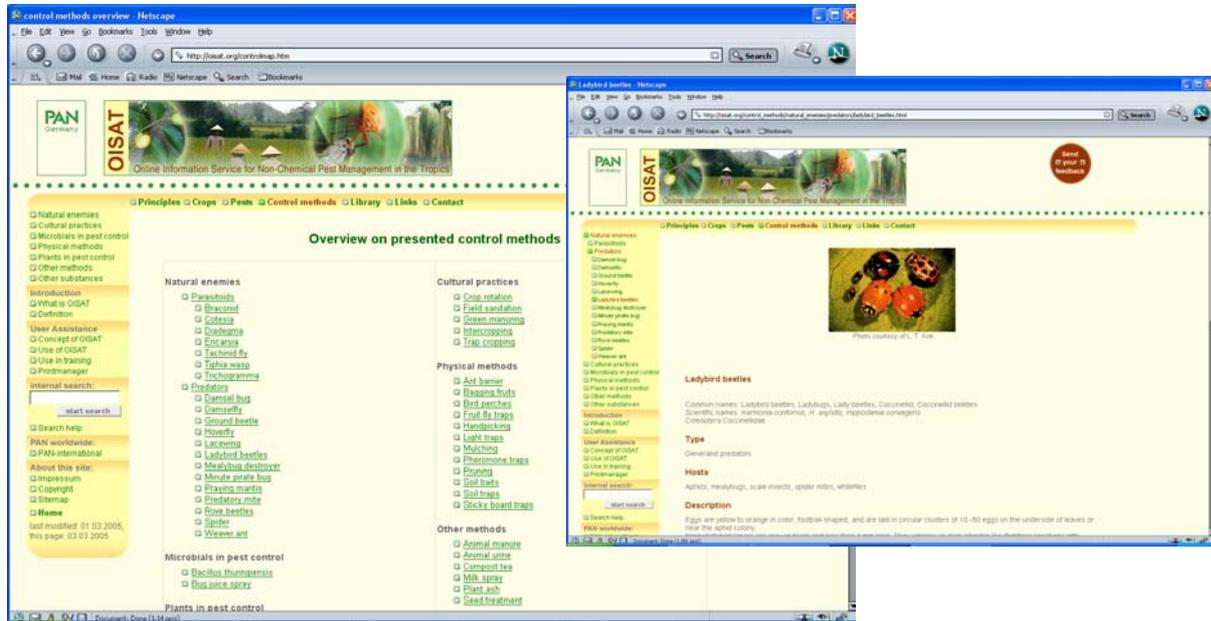
When you are at the preventive and curative control sites, you can directly go to the control methods by 'double clicking' the underlined link, e.g. ladybird beetle.

Diseases have the following subcategories

1. Host plants
2. Affected growth stages
3. Affected plant parts
4. Symptom/damage
5. Conditions that favour development
6. Prevention and control
7. References and external links

## The Control Methods

By 'double clicking' the  [Control methods](#) button and the desired beneficial insect, you will be directed at these pages



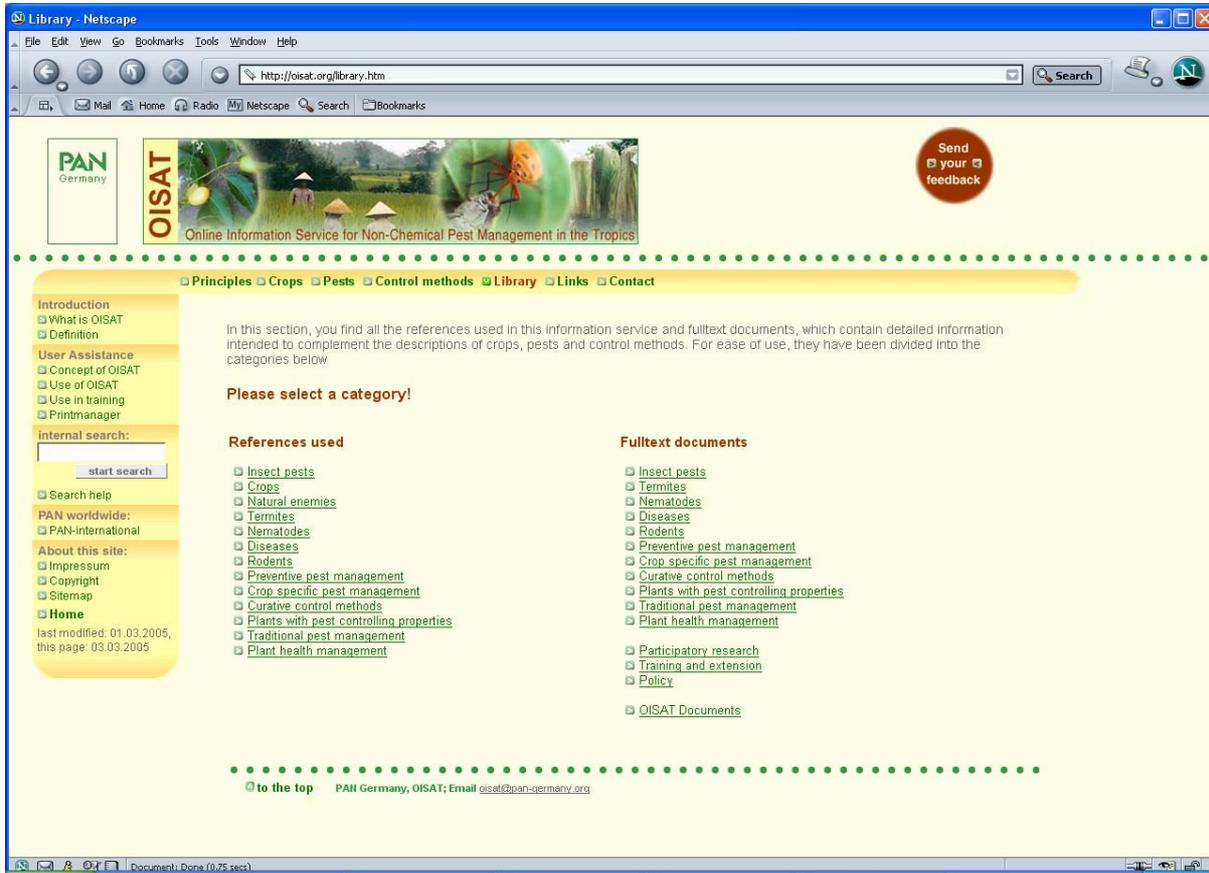
The control method structure includes the following information:

1. Natural enemies - predators, parasitoids, and pathogens used to control insect/mite pests. They are used to maintain another organism's population density at a lower average than would occur in their absence. Included in this page is their description and conservation. Conservation is the action taken to protect and maintain established populations of natural enemies in a given area (e.g., planting of flowering herbs to increase the population of ladybird beetles).
2. Plants in pest control - botanical plants that have pest-controlling properties, which possess low mammalian toxicity, no health hazards, and environmental pollution. When used in natural form, there is no risk of developing pest resistance; cause less hazards to the non-target organisms; no adverse effect on plant growth, seed viability, and cooking quality; and are less expensive and easily available. Presented in this page are the plant extract formulations, materials needed for the preparation, how to prepare, how to use, and the pests controlled.
3. Microbials - pathogens (bacteria and virus) used to control insect pests
4. Cultural practices - farm management practices used to reduce the numbers of pests that are attacking cultivated plants. These practices alter the environment, the condition of the host plant, or the behaviour of the pest to prevent or suppress an infestation. The farm practices disrupt the normal relationship between the pest and the host plant and make the pest less likely to survive, grow, or reproduce. Common cultural practices include crop rotation, intercropping, green manuring, trap crops, composting, varying time of planting or harvesting, soil conservation, fallowing, weed, water, and fertilizer management, among others.
5. Physical methods - devices, machines, farm tools, traps, screens, barriers, fences, bird perches, mulches, baits and other methods like pruning, thinning, handpicking, etc., used to control pests or alter their environment
6. Other substances – homemade and other inorganic substances that are accepted in organic farming

7. Other methods - examples are: plant ash, animal manure, and animal urine

## The Library

By 'double clicking' the  [Library](#) button you are directed this page:



The Library presents an overview on all the references used in OISAT as well as full text documents, which contain detailed information that are intended to complement the descriptions of crops, pests and control methods.

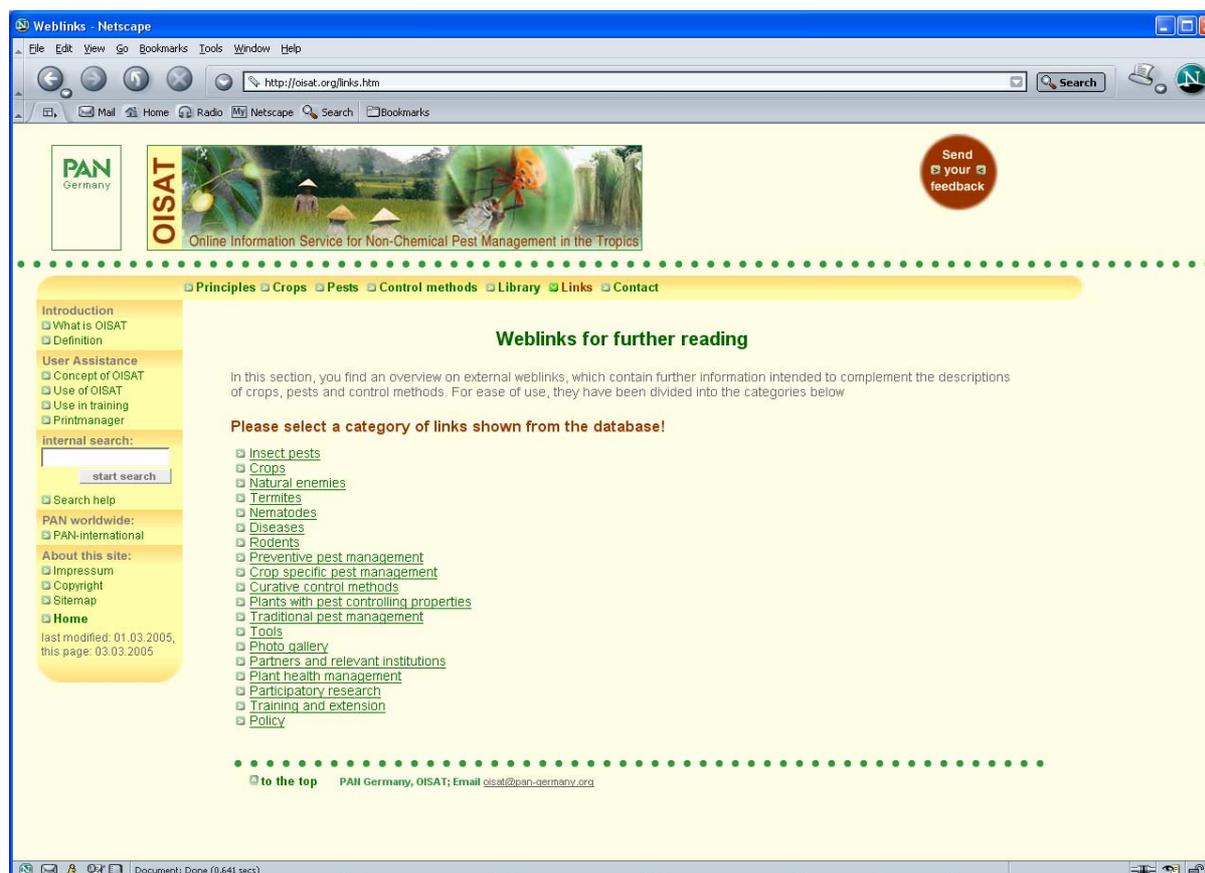
The references show the following sub-categories:

- Insect pests
- Crops
- Natural enemies
- Termites
- Nematodes
- Diseases
- Rodents
- Preventive pest management
- Crop specific pest management
- Curative control methods
- Plants with pest controlling properties
- Traditional pest management
- Plant health management

The full text documents that you can download show the following sub-categories:

- Insect pests
- Termites
- Nematodes
- Diseases
- Rodents
- Preventive pest management
- Crop specific pest management
- Curative control methods
- Plants with pest controlling properties
- Traditional pest management
- Plant health management
- Participatory research
- Training and extension
- Policy
- OISAT Documents

By 'double clicking' the  [Links](#) button you are directed at this page:



The Links directs you to the external websites that will provide additional information on the following:

- Insect pests
- Crops
- Natural enemies
- Termites
- Nematodes
- Diseases
- Rodents
- Preventive pest management
- Crop specific pest management
- Curative control methods
- Plants with pest controlling properties
- Traditional pest management
- Tools
- Photo gallery
- Partners and relevant institutions
- Plant health management
- Participatory research
- Training and extension
- Policy

### How to get the best results!

During your OISAT internet search, at the search function you can try the following:

- A leading plus (+) sign indicates that this word must be present in every row returned.
- A leading minus sign (-) indicates that this word must not be present in any row returned.
- These two operators are used to change a word's contribution to the relevance value that is assigned to a row. The < operator decreases the contribution and the > operator increases it.
- An asterisk (\*) is the truncation operator. Unlike the other operators, it should be appended to the word, not pre-pended.
- The phrase that is enclosed in "double quotes", matches only rows that contain this phrase literally as it was typed.

And here are some examples:

- [apple banana](#)... find rows that contain at least one of these words.
- [+apple +juice](#)... both words.
- [+apple macintosh](#)... word "apple", but rank it higher if it also contain "macintosh".
- [+apple -macintosh](#)... word "apple" but not "macintosh".
- [+apple \(>turnover <strudel\)](#)... "apple" and "turnover", or "apple" and "strudel" (in any order), but rank "apple pie" higher than "apple strudel".
- [apple\\*](#)... "apple", "apples", "applesauce", and "applet".
- ["some words"](#)... "some words of wisdom", but not "some noise words".

The words are presented in the search results with colored background with upper-case letters. The first word- green, the second- yellow, and for further words, there is none.

The Print manager can help you generate a printer-friendly version of an individual page or several pages of your choice from all the existing pages. Don't worry- the designed-elements and the navigation bars will not appear in your printouts.

Each printable page has a corresponding small checkbox in front of each page title. By clicking this box, the desired page is selected. Thus, you can compose your own selection, i.e. those pages you wish to printout. For some pages where checkboxes are missing, these pages are overviews generated from the database or a particular selection of each search result. At the end of the list, there is a small submit button. By clicking it, you confirm your selection. Then, a printer-friendly document is generated by the OISAT data base-system that contains all the selected pages. At the head of this document, there are two buttons generated with Java-Script. The first button starts the printing (on condition that your printer is attached) and the other closes the opened-window. These two buttons do not appear on the printouts. If Java-script is not activated, start again the print-control of your browser to make the printouts. If you wish to change the order of the selected pages or you want to insert some line feed for an exact page break, you can save the printer-friendly version presented in the opened-window on your hard disk and alter it with an editor of your choice.

From the printouts, you can make a one-page handout, or a brochure/leaflet that you can translate into the local language or dialect, which is better understood by the farmers. However, you MUST NOT use the photos of the pests and crops, unless otherwise permitted by the cited sources. The organizations and owners of the photos permitted that such are for OISAT website purposes only.

### Feedback

With the Feedback button located at the right hand side on the top of your screen, you can send us technical information to be included or suggestions on how we can improve OISAT.





