



OrgaCount

Getting Started

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## *Welcome*

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Thank you for choosing OrgaCount to aid your counting processes. We have worked hard to make the application highly efficient and easy to use for you. This 'Getting Started' guide shall be a short reference for you, in order to enable you to start right away with the counting procedure and save as much time as possible. In order to get more deeply involved with the detailed functions of OrgaCount, please, download the complete User Guide, which is available on

[http://orgacount.com/site/downloads/OrgaCount\\_User\\_Guide.pdf](http://orgacount.com/site/downloads/OrgaCount_User_Guide.pdf).

## *Copyright & Contact*

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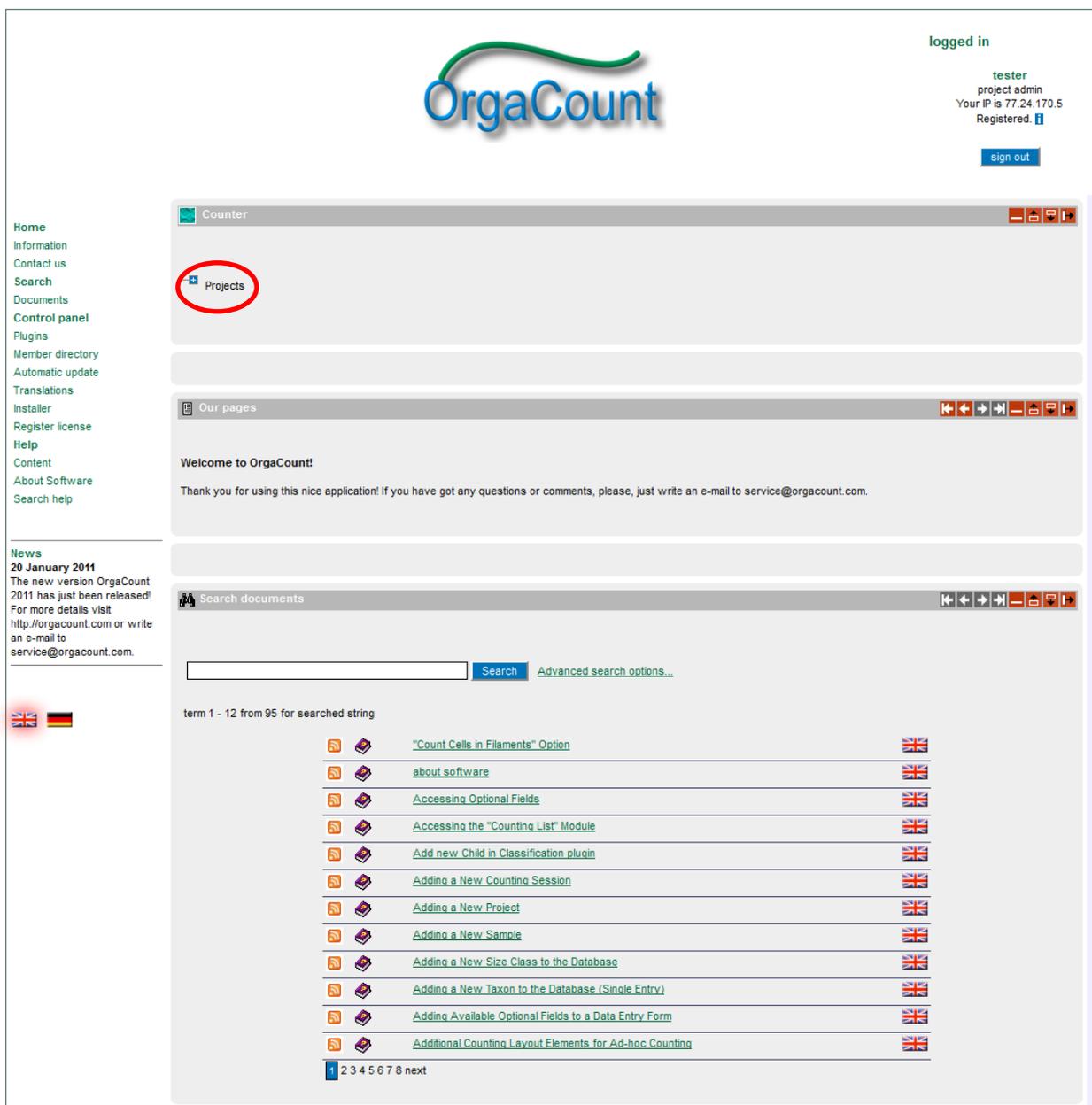
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## Getting Started

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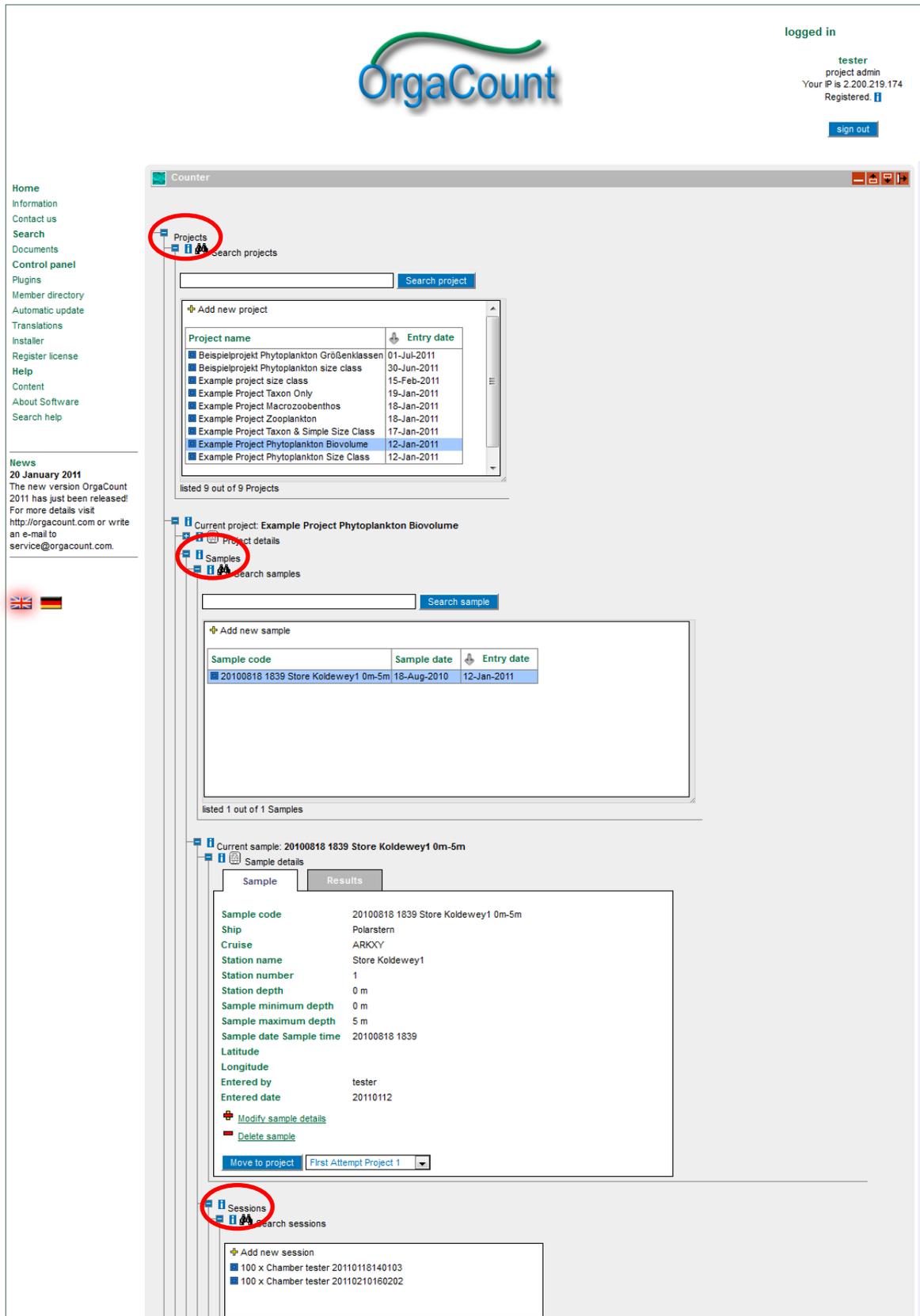
The counting programme OrgaCount has got an user-interface with three different windows (panels). While the lower two of these windows have got a rather informational character – you can see messages from OrgaCount here or navigate through the help system – the upper panel, which is called *Counter*, contains the main application and will lead you through the counting process.

After logging in with your user name and password on the upper right side, the item *Projects* (marked in red) becomes visible. It has got a plus sign  located to the left:



The screenshot displays the OrgaCount web application interface. At the top center is the OrgaCount logo. In the top right corner, it shows the user is logged in as 'tester' (project admin) with IP 77.24.170.5, registered, and a 'sign out' button. On the left side, there is a navigation menu with links: Home, Information, Contact us, Search, Documents, Control panel, Plugins, Member directory, Automatic update, Translations, Installer, Register license, Help, Content, About Software, and Search help. Below the menu is a 'News' section dated 20 January 2011, announcing the release of the new version of OrgaCount 2011. At the bottom left, there are flags for the United Kingdom and Germany. The main content area is divided into three panels. The top panel, titled 'Counter', contains a button labeled 'Projects' with a plus sign icon, which is circled in red. The middle panel, titled 'Our pages', displays a welcome message: 'Welcome to OrgaCount! Thank you for using this nice application! If you have got any questions or comments, please, just write an e-mail to service@orgacount.com.' The bottom panel, titled 'Search documents', features a search input field, a 'Search' button, and a link to 'Advanced search options...'. Below the search field, it shows 'term 1 - 12 from 95 for searched string' and a list of 12 search results, each with a document icon, a title, and a UK flag icon. The results include: 'Count Cells in Filaments' Option, about software, Accessing Optional Fields, Accessing the 'Counting List' Module, Add new Child in Classification plugin, Adding a New Counting Session, Adding a New Project, Adding a New Sample, Adding a New Size Class to the Database, Adding a New Taxon to the Database (Single Entry), Adding Available Optional Fields to a Data Entry Form, and Additional Counting Layout Elements for Ad-hoc Counting. At the bottom of the search results, there is a pagination control showing '1 2 3 4 5 6 7 8 next'.

That plus sign  indicates that the counting environment is organised in various modules related to each other in a tree-like structure. Once expanded, all levels (marked in red) are displayed in that hierarchical tree:



The screenshot shows the OrgaCount web application interface. The top right corner displays the user is logged in as 'tester' (project admin) with IP 2.200.219.174, registered on 12-Jan-2011, and a 'sign out' button. The left sidebar contains navigation links: Home, Information, Contact us, Search, Documents, Control panel, Plugins, Member directory, Automatic update, Translations, Installer, Register license, Help, Content, About Software, and Search help. A news section dated 20 January 2011 mentions a new version release. Below the sidebar are flags for the UK and Germany.

The main content area is titled 'Counter' and features a hierarchical tree structure on the left. The tree includes:

- Projects** (circled in red): Search projects. Below it is a table of projects:

Project name	Entry date
Beispielprojekt Phytoplankton Größenklassen	01-Jul-2011
Beispielprojekt Phytoplankton size class	30-Jun-2011
Example project size class	15-Feb-2011
Example Project Taxon Only	19-Jan-2011
Example Project Macrozoobenthos	18-Jan-2011
Example Project Zooplankton	18-Jan-2011
Example Project Taxon & Simple Size Class	17-Jan-2011
Example Project Phytoplankton Biovolume	12-Jan-2011
Example Project Phytoplankton Size Class	12-Jan-2011
- Current project: Example Project Phytoplankton Biovolume**
- Samples** (circled in red): Search samples. Below it is a table of samples:

Sample code	Sample date	Entry date
20100818 1839 Store Koldewey1 0m-5m	18-Aug-2010	12-Jan-2011
- Current sample: 20100818 1839 Store Koldewey1 0m-5m**
- Sessions** (circled in red): Search sessions. Below it is a table of sessions:

100 x Chamber tester 20110118140103
100 x Chamber tester 20110210160202

This tree-like structure allows you to easily understand the relationship between items, and provides an easy navigation flow to the various functions available at each level of organisation. Information is stored by three main levels of organization, from general to specific: projects, samples, and sessions:

- *Projects* hold general information on a working programme that can be defined by a certain institution, a specific geographic location, a grant, etc. One project may contain one or more samples and sessions.
- *Samples* are treated in the same sense as they are used in biology and, particularly, in oceanography. They hold information about all data that associated to a real sample, such as codes, information about the collecting site and the local conditions, counting procedures etc. One sample may contain one or more sessions.
- *Sessions* only contain those kinds of information related to organism counting processes, such as the microscope settings, the area counted, etc. For counting modes using plankton counting domains such as Phytoplankton Size Class and Phytoplankton Biovolume, please note that each counting session is microscope- and magnification-specific.

Projects, samples and sessions work in very similar ways, creating an easy workflow once you are familiar with the principles of working with OrgaCount.

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## *Setting up a New Counting Session*

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The following represents the steps to set up a new counting session. If you are a **first-time user** of OrgaCount and wish to start counting, this section is for you:

1. First, go to the *Counter* panel and expand the available branches by clicking on the plus sign  located to the left of the branch label. Expand both the *Current project* and the  *Search projects* branch.

### Setting up a new Project

2. **Add a new project** (a project holds general information on a working programme that can be defined by a certain institution, a specific geographic location, a grant, etc.):
  - In the search box, click on the item  *Add new project*
  - You will see the text *Current project: untitled project – unsaved*, which means that the branch is now expanded and a project is active, but it has no name yet and is not saved.
  - At the same time, a first sub branch labelled  *Project details* appears which contains an empty data entry form.

Current project: **untitled project - unsaved**

Project details

Projects Results

Enter data Preview data Save data

Project name

Project description

Project abbreviation

Start date

End date

Counting domain: macrozoobenthos [Show counting domain settings](#)

Optional fields

- Add new field - single line
- Add new field - input multiple lines
- Comment
- Institution
- Number

Cancel Preview Save data

3. Fill in relevant project information: add a project name, a description, an abbreviation, etc.

- If needed, open the list of optional fields (click on the  sign at the right side of the label named *Optional fields*), and add other types of information to describe the project.
- If you licensed more than one counting mode, or have purchased the plugin [SetCountingDomain](#), you will be able to choose among different counting domains. In this case, please, note:

**The selection of the counting domain is very important**, for this will specify the type of counting strategy, the master taxon and size class tables, and other variables used in rendering the OrgaCount interface, such as reports etc. (see *chapter 6 in the User Guide: Counting* → [Counting Modes& Domains](#)).

4. Preview, modify and/or save the project:

- If you wish to preview the project, click on the *Preview* button at the bottom of the form. A module with your entered information and settings is displayed which you can now review.

- Click on the *Back* button to leave the preview mode and modify some of the information; or click on *Save data* in order to save the project in the database.
- After having saved the project, a message displaying the name of the saved project and its internal database identifier pops up. Click on the *OK* button. The project details module is accessible at any time within the branch labelled *Project details*.

Please note that a current project branch is tagged now, using the name of the project that was just created. When saving project information, sample sub-branches are automatically created to the current project branch.

5. Expand the  *Search samples* branch.

Please note that a *Current sample* branch is tagged with *none selected*; hence, a sample has to be added to the current project and selected for further use. The current project branch is tagged with the name of the project recently added to the database.

- Please refer to *chapter 3 in the User Guide: Projects* for more details.

### Setting up a New Sample

6. **Add a new sample** (samples on OrgaCount are treated in the same sense as they are used in biology and, particularly, in oceanography):
  - In the search box, click on the item  *Add new sample*
  - A branch labelled *Sample details* will be expanded; which contains an empty data entry form. The *Current sample* branch is tagged with the text *untitled sample – unsaved*.
  - In the search box, click on the item  *Add new sample*
  - You will see the text *Current sample: untitled sample – unsaved*, which means that the branch is now expanded and a sample is active, but it has no name yet and is not saved.
  - At the same time, a first sub branch labelled  *Sample details* appears which contains an empty data entry form.

7. Enter relevant information relating to the sample. Add a sample code, a ship, a cruise, etc. The sample code can also be generated automatically, including the information of the various input fields. For this purpose, just check the box tagged with *automatically*, and select a combination from the click list **F**.
8. For adding geographical information on the sample, choose one of the optional fields labelled *Geographic units*; the different formats used for geographical coordinates specify as follows:
  - DD stands for *decimal degrees*;
  - DM is used for *degrees and minutes*;
  - DMS specifies *degrees, minutes, and seconds*.

Please use positive numbers, only. For *seconds* only integers are possible. A fault message will appear in red if any of the information entered does not fit the format chosen.
9. If needed, open the list of optional fields (click on the **+** sign on the right hand side of the label named *Optional fields*) to add more types of information describing the sample.
10. Preview, modify and save the sample:
  - Click on the *Preview* button at the bottom end of the form. A module with all entered sample data is loaded for review.

- The *Load previous data* button is a useful feature if you have to change only minimal details from sample to sample. By using this button you can load the entered information of your previous sample and edit them for the new one.
  - Click on the *Back* button to modify some of the information you have entered, or click on the *Save data* button to save the sample in database.
  - After having saved the sample, a message displaying the code of the saved sample and its internal database identifier pops up. Click on the *OK* button. A module containing the sample details is displayed within the branch labelled *Sample details*.
- Please refer to *chapter 4 in the User Guide: Samples* for more details.

### Setting up a New Counting Session

11. **Add a new session:** Sessions in OrgaCount contain only those settings generally related to organism counting processes.
  - For counting modes like Phytoplankton Size Class and Phytoplankton Biovolume, please note that each counting session is microscope- and magnification-specific (see *chapter 6 in the User Guide: Counting* → [Counting Modes & Domains](#)).
  - In the *Search sessions* box, click on the item **+Add new session**.
  - Under the item *Current Session*, a new branch labelled *Session details* is expanded, containing an empty data entry form.

Current session: untitled session - unsaved

Session details

Enter data Preview data Save data

Microscope name

Magnification

Counted area item

Counting factor

Sedimentation volume 25 ml

Count cells in filaments

Optional fields +

Cancel Preview Save data

12. Enter information relating to the session, including the microscope name, the magnification, the counted area item, the counting factor, the chamber volume etc. :

- Please note that some of these fields may not be displayed in counting domains that do not use microscopes. However, if you need these entry fields, simply open the list of optional fields (by clicking on the  sign at the right hand side *Optional fields*), and add more information fields to describe your session.
- The data information entered about microscope, magnification, counting factor, and counted area item is essential to calculations of counts and biovolumes. Therefore, **please pay close attention when filling in these fields**. However, the information may be changed at any time later, without affecting the counting results. Moreover, whilst these settings you enter are considered the default for this session, some information (like the counting factor or the counting area unit) may be changed later for each individual taxon (or size class) counted.

13. Preview, modify and save the session:

- Click on the *Preview* button at the bottom end of the form. A module containing all session settings is loaded for review.
  - Click on the *Back* button to modify some of the information you have entered, or click on *Save data* in order to save the session in database.
  - More branches labelled  *Counter* and  *Settings* will appear beneath the session branches.
- Please refer to *chapter 5 in the User Guide: Sessions* for more details.

14. Set up the counting layout using the  *Counting layouts* interface under the item  *Settings*.

The counting layout refers to the list of items (taxa, size classes of taxa, or items that are not organisms) that are counted during a counting session. Each item contains elements used for accomplishing the counting: the name of a taxon, details on its size class (in the case of predefined size classes), the keyboard button it relates to, a textbox with the count value, and other controls for individual counting settings. The main elements of the counting layout are shown below.

The counting layout may be adjusted using the branches under  *Settings*. There are two major settings that need to be considered here:

- (a) the counting list,
- (b) the keyboard layout.

➤ Please also see *chapter 6 in the User Guide: Counting* → *The Counting Layout* for further details.

#### (a) Setting up a Counting List

First of all, open the branch  *Counter*, which you will find under the item *Current session*. During the following process, the selection of species from the counting list and the assigned keys will be displayed here in the tab *Counting*

layout. The assigned keys and other adjustments can be changed in this tab at any time. Please note: This tab will not display any content before you set up your counting list, as described below.

In order to build and adjust the counting list that will be loaded in your counting layout, please expand then the branches

 Settings →  Counting layouts →  Counting list.

Current session: 200x Chamber tester 20110215130219

Session details

Counter

Counting layout Results

Amphidinium crassum	 0	Gyrodinium	 0	Gyrodinium 57 45-55x38-42	 0
Merismopedia punctata	 0	Merismopedia punctata 2 2.5-3.6 cnpcu: 4	 0	Microcystis aeruginosa	 0
Microcystis aeruginosa 1 4-6	 0	Microcystis aeruginosa 2 4-6 cnpcu: 20	 0	Planktolyngbya contorta 1 1.5x100 cnpcu: 25	 0
Planktothrix agardhii	 0	Planktothrix agardhii 1 3.5x100 cnpcu: 25	 0	Scenedesmus acuminatus	 0
Scenedesmus acuminatus 4 5-6x15-25 cnpcu: 4	 0	Snowella	 0	Snowella 2 1-4 cnpcu: 10	 0
Snowella 3 1-4 cnpcu: 20	 0				

Manage selection of items in counting layout by using module loaded at branch Settings -> Counting layouts -> Counting list

Total count:  0

Settings

- Keyboard layouts
- Counting layouts
- Counting list

Selected counting list

Change counting list 

-  Add new counting list
-  Save counting list as
-  Delete current counting list
- Amphidinium crassum
- Gyrodinium
- Gyrodinium n57
- Merismopedia punctata
- Merismopedia punctata n2
- Microcystis aeruginosa
- Microcystis aeruginosa n1
- Taxa counted in current session
- Counting list shortcut

List of all items/taxa

A B C D E F G H I K L M N O P Q R S T U V W X Z

-  Add new taxon/item
-  Acanthoica quattrosolina Lohmann 1903 
-  Achnanthes Bory 
-  Achnanthes taeniata Grunow in Cleve & Grunow 1880 
-  Achroonema lentum Skuja 1956 
-  Achroonema proteiforme Skuja 1956 
-  Actinastrum hantzschii Lagerheim 1882 
-  Actinocyclus 
-  Actinocyclus normanii f. normanii (Gregory in Greville) Hustedt 1957 
-  Actinocyclus normanii f. subsalsus (Lublin, Dannfelt) Hustedt 1957 
- Taxa counted in one of the sessions
-  View list of taxa and their size classes

Use the two panels in the Counting list module to search for taxa/items (see the list in the right panel of the module) and to include these taxa in your personal counting list (left panel). If your counting mode contains a predefined species list, this list will be displayed in the right panel and you will then be able to directly build your counting list from this species list. Otherwise, you will have to build up your own list step-by-step by clicking on the item *Add new taxon/item* in the right panel and to add new taxa/objects. In order to manage your counting list:

- Add or remove taxa/items to the counting layout by clicking on the check boxes located in front of each name of taxa/items.
- The  buttons can be used to expand the list. Click on a checkbox near an item to add it to counting layout.

Please note that the counting list used for a session may be adjusted at any time during counting.

- Keyboard keys can be allocated to taxa/items in a counting layout. By clicking on a taxon/item name, a popup appears in which you can select a particular key for a particular taxon. Only those keys actually available for use are displayed in the popup window.
- Please see *chapter 8 in the User Guide: [Managing Counting Lists](#)* for more information on working with counting lists.

Please note:

The counting lists are saved in database and can be reused when counting other samples. They can also be modified and/or saved under distinct names. You can work with more than one counting list during one single counting session.

### Counting Lists as Templates

Counting lists work as templates which can be used for several sessions. However, please note that these templates change immediately when items are added or deleted. This is in contrast to what you are used to with other software working with templates. Therefore, if you want to create a modified counting list, save the existing counting list first by giving it another name (use the  *Save counting list as* option). Then add or delete items from the new list. This way, your original list remains untouched.

**A useful tip:** In order to be on the safe side; create a ‘master template’ as a backup and use this for setting up new lists, which you can then use for counting sessions.

### Choosing an existing Counting List

 *Settings* →  *Counting layouts* →  *Counting list*.

- Click on one of the template names in the list; and the design of the counting layout will change automatically.

- For further information please see *chapter 6 in the User Guide: Counting* → *Settings* → [Modifying the Counting Layout](#).

### (b) Selecting a Keyboard Layout

OrgaCount allows you to select one of a variety of different keyboard layouts, which mainly differ according to various country features and languages. Depending on the language of the relevant keyboard, some of the keys in the keyboard layouts may not be available. It may therefore be useful to switch to a relevant keyboard layout which lists more items in your counting layout. The keyboard you use with your computer is relevant to the settings of the keyboard layout you should select.

In order to maximise the number of keys available for counting, please expand the branches  *Settings* →  *Keyboard layouts*:

- Now pick an appropriate keyboard type from the keyboard selection list.
- The list of available keys is automatically rendered after your selection.

As you can see in the image below, keys that are not used in the current counting layout are displayed in white. Used keys are displayed in blue. If there are keys that are used in your current counting layout, but not available on the chosen keyboard type, these are marked in red. You can use this feature as an easy way to see which keys are available.

#### Please note:

The keyboard layout may be changed at any time during counting and does not affect your counting results.

- For more information please see *chapter 6 in the User Guide: Counting* → *Settings* → [Selecting a Keyboard Layout](#).

### 15. Start counting:

Click on *Start counting*  near the *Results* tab to start the active counting. You will notice that the symbol of this button changes and the text 'counting items' in a red box appears next to it, when counting is active. At the same time, the tab *Counting layout* will have a yellow background colour. Press now relevant keys on the keyboard or use the mouse to click on buttons in the counting layout interface in order to count taxa/items, or their size classes. To stop the active counting, click on the *stop counting* button . During a session, you can repeatedly start and stop the counting, as often as you like (see *chapter 6 in the User Guide: Counting* → [Starting the Counting](#) and *Counting* → [The counting layout](#) → [Generic Elements of the Counting Layout](#)).

Current session: 200x Chamber tester 20110215130219

Session details

Counter

Counting layout

Results



Amphidinium crassum <b>a</b> 0	Gyrodinium <b>t</b> 0	Gyrodinium 57 45-55x38-42 <b>d</b> 0
Merismopedia punctata <b>1</b> 0	Merismopedia punctata 2 2.5-3.6 cnpcc: 4 <b>z</b> 0	Microcystis aeruginosa <b>c</b> 0
Microcystis aeruginosa 1 4-6 <b>ö</b> 0	Microcystis aeruginosa 2 4-6 cnpcc: 20 <b>f</b> 0	Planktolyngbya contorta 1 1.5x100 cnpcc: 25 <b>v</b> 0
Planktothrix agardhii <b>ä</b> 0	Planktothrix agardhii 1 3.5x100 cnpcc: 25 <b>g</b> 0	Scenedesmus acuminatus <b>h</b> 0
Scenedesmus acuminatus 4 5-6x15-25 cnpcc: 4 <b>e</b> 0	Snowella <b>j</b> 0	Snowella 2 1-4 cnpcc: 10 <b>u</b> 0
Snowella 3 1-4 cnpcc: 20 <b>r</b> 0		

Manage selection of items in counting layout by using module loaded at branch Settings -> Counting layouts -> Counting list

Total count: **0**

Settings

Keyboard layouts

Keyboard

Keyboard layout German



Output numbers format

Number of decimals

Decimal separator

Thousands separator