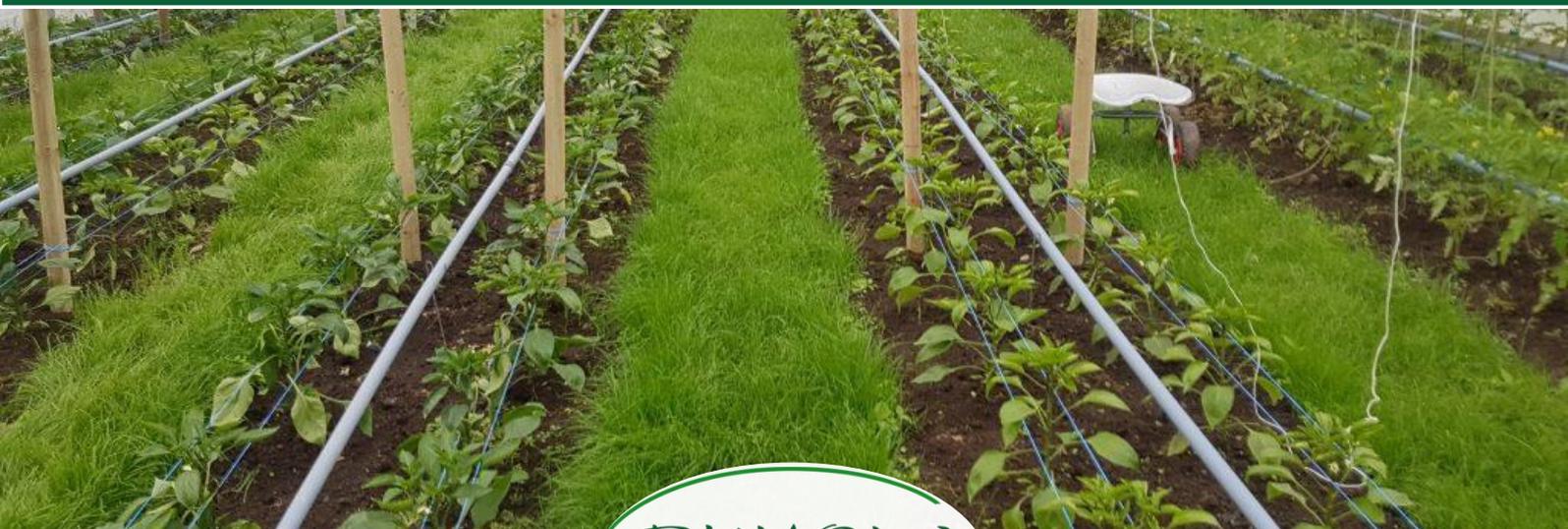




Manual Micro Farm Planner

(Version 2.0)





User manual for the Micro Farm Planner

(Version 2.0)

Thank you for choosing the Micro Farm Planner!

This manual contains instructions and tips for a proper workflow with the program.

We recommend all new users to read the manual in parallel with the setup wizard, which guides them through the basic functions in the program, to set up the farm master data step by step and to get to know all the functions. The manual is structured according to the main areas of the program for quick reference:

- 1) Start screen (dashboard), program control, wizard
- 2) Preferences and Master data input for farm, crop- and field management
- 3) Crop calendar
- 4) Task calendar
- 5) Harvest recording, delivery, (article-)storage, customer/member administration, seed data, documentation, and statistics
- 6) Help functions and app information
- 7) Smartphone app
- 8) Legal Information

- Many explanations of functions, input and selection fields are also available directly in the program when the mouse pointer points to the respective element. Use the wizard and watch our video tutorial!
- We recommend using Firefox, Chrome or Safari Browser for a proper use of the Micro Farm Planner.
- In the crop calendar and fields-section use a browser-resolution of 80% for a good overview.

You have questions or an idea for improvement? Email us to info@micro-farm-planner.com or use the contact form on our website (also accessible by clicking on "Feedback" in the info menu of the Planner).

We wish you a successful start and good planning!

The Rukola-Soft Team

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1 Navigation and Dashboard



The **navigation bar** of the program is displayed at the top of the screen. The buttons on the bar give you access to the main areas (from left to right: Dashboard, Crop Calendar and Task Calendar, Planning and Data Menu), operational and user settings. These functional areas are described in separate chapters of the manual.

The year switcher is used to select the plan year you want to view/edit. To the right of it, is the name of the program area, in which you are located.



The Magic Wand opens the Wizard, for learning and repeating short videos on all basic operating functions of the program.

The button shows a red number until each step is completed. Clicking the button opens the wizard window. Your progress is displayed at the top, each completed step results in a green leaf. The steps can be done in any order and repeated at any time. "Optional" steps are not relevant for all types of farms and maybe can be skipped. New starters are recommended to go through all steps from top to bottom.

To perform a step, click on it and read the short description. If a video is displayed (not for steps 1 and 2), click on it to start. If there are still questions after the video, click on "user manual" - the link will directly show the appropriate chapter when the manual is opened in a browser-window. According to the respective step in the wizard the program sections will be changed as well.

Click on "Perform now" in the upper right corner to just perform the shown step yourself.

Open the wizard again at the top of the bar and select the next step, to continue.

Exit the wizard with the "Close" or "Do not show again" buttons.



Use the **language selector** to display the program in English or German.



In the **info menu**, on the right side of the bar, the current program version and the currently logged in user are displayed at the top.

This is followed by links to **tutorial videos**, **user manual**, **Q&A** and **login for the mobile version**. Below that, social media as well as legal terms - imprint and privacy agreement, T&Cs, and licenses - can be accessed.



The **"Logout" button** exits the program (all changes are saved).

 After logging in, the **dashboard** opens as the start screen of the program and by clicking on the "Home" button on the far left of the navigation bar

The dashboard's topic cards, with links to mobile version for smartphone use and links to crop plan, task calendar, documentation/statistics sections, contain practical information and the latest news from your farm.

If, for example, one or more set plans are incomplete, the "Crop planning" card indicates this.

Clicking on the link will take you to the crop calendar, where the relevant sets will be displayed for you to edit.

The "Release" card displays important information and changes to the current program version.



2 Settings and master data

2.1 Settings

 Click on the icon in the navigation bar. Personal settings for users/co-workers, farm-specific default values and master data are managed here.

Click the "pencil" icon at the top of the respective card to edit. Only white input fields can be edited, fields with a grey background cannot be changed. Click the "update" button at the bottom of the card to apply changes.

2.2 Options in the Settings Menu

Farm information

Farm data: Name of the user environment (repository) and selected crop system (Commercial Vegetable Production, Market Garden, CSA).

Customer data: Customer number and contact- and operating data stored during registration.

Prices: Currently booked subscription or if still test customer paid booking

Profile

Settings: Set default view (day/week/month) of your task calendar.

API-Keys: Shows keys for used interfaces (e.g., connection of electronic scales for harvest recording or harvest quantities for webshop)

Area parameters

Bed settings: Standard dimensions for bed width, -length and path width as well as standard values for planters or multi-pot plates.

Co-worker

All stored co-workers are displayed here. Create a new **co-worker**, by clicking "**Create**", enter personal data, and assign a suitable avatar. Click on the list-entry for changes in a co-worker's settings. Please note: Roles can only be assigned after an invitation has been sent to the employee's mail address.

Own access: Enter the co-worker's email address to set up their own Micro Farm Planner access - by confirming the email entry, you will send an **invitation email with a confirmation link**. As soon as the invitee clicks on the link in the invitation email, his/her personal access to your Micro Farm Planner environment will be activated - not received the activation email? – please first check spam folder; No email found? Click on "Resend activation link" at the bottom of the login window on our website micro-farm-planner.com).

Record working time: Enter the hiring date, the annual leave days, the remaining leave from the previous year if applicable, and the weekly working hours. Enter working hours for each day of the week below. The data will then be used in the time registration for this person (see Time registration). You can also register the weekly pensum including the distribution over the week days, e.g. Monday=8 hours, Tuesday=4 hours.

Order Processing

Create your order processing contract with us as PDF here

Modules

Overview of available and usable crop planner add-ons

Roles and rights

User roles and rights management (optional module): Standard roles with predefined rights are stored under **Roles and Rights**. User-defined roles can be created and their rights for the micro farm planner use can be defined. In the menu under "Co-workers", these roles can be assigned to each team member.

Time registration

Time registration can be used for all registered co-workers (menu item Employees) to digitally record their attendance times (record also with the mobile app - see point 7.1.6). Store vacation and working hours in the co-worker's settings. They are then displayed here, as are company holidays (see Public Holidays).

Using the drop-down menu at the top, a month can be selected in the tabular overview or switched back and forth between months. Corrections or deletions of working times are made via the clock symbol in the "Actual" column.



In the drop-down menu of the "Type" column holidays, illness, or flexdays can be specified. A coloured bar distinguishes off-work days or weekends (in grey), holidays or illness from normal working days. Holidays and working hours can be stored in the employee's settings and are then displayed here along with the company holidays (menu item Holidays).

Time registration manager: Here, the company management or anyone with activated rights for the time registration manager (see menu item Roles and rights) can view the time records of all co-workers. For viewing the working hours and absences please select the name of the co-worker from the dropdown list.

Public Holidays: Holidays can be imported for every federal state in Germany. By clicking on the "Plus" symbol, user-defined holidays can be created. The list of holidays created here will then be considered in the time registration. In addition to public holidays, any other custom

holidays can be defined. On these days, a required working time of zero is displayed for all employees. Half-day holidays are indicated as 50% under "Working Time Exemption".

Change password

Enter your old password and enter a new one. Confirm the new password and click on "change".

2.3 Crops



To view or edit your crop's master data, open the crop view by clicking on Planning/Crops in the navigation bar. All crops grown on the farm are stored here. When creating sets (planning the planting sets for the season in the crop calendar), crops stored here are used as data basis.

Create new entry in the crops list: You can choose from our crop templates or create non-existing crops from scratch. In the following, the functions are described in detail. However, it is also possible to directly plan sets of a crop in the crop calendar and use the integrated crop-creation, to create the crop in the meantime.

 See point 3.1, Creating sets

2.3.1 Creating crop

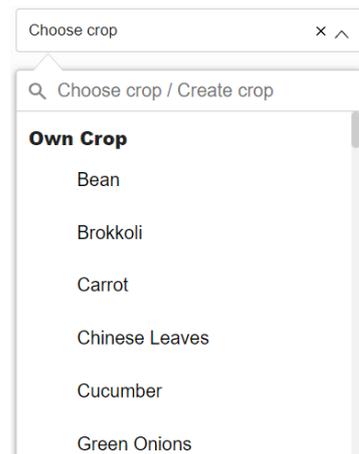


Create crop: Start creating a new crop entry, by clicking "Create crop"-button on the left. Select a crop from the templates or enter the name of the new crop. Edit the data and click on "Create crop" to create a new crop entry. All data can be adjusted later. To do this, click on the crop in the list to display its data.

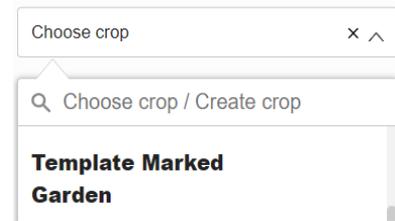
Create sets: Click + Create set (above the Crop list) to select any crop from the list for which sets are to be scheduled. After selection you will get to the set creation editing window. When selecting an "own crop" from the first list section (= crops from farm crop list), leads to set editing window directly. Be aware, if using "create crop"-Button instead of "create set", selection of an "own crop"! opens the crop in the farm crop list and aborts crop creation.

 See point 3.1, Creating sets

Create crop while creating sets: Click + Create set and select "Template Market Garden" from the second section or "Template Field Vegetable Crops" from the bottom-section. You can adjust the crop data in the next window. When finished, enter the planting set-creation window by clicking "next". The use of "next" button also added to the farm master data list.



Crop templates: Use them for Market-Garden crop system (0.75 m bed system, smaller plant spacing, more crops) or Field Vegetable Crop system (1.2 m bed width, plant spacing for machine planting, common field crops) as a basis for your farm crop masterdata. In any case we recommend you check if they fit your system and adjust.



2.3.2 Edit crop list

+ Create crop + Create set					Search
Bean	+	2 sets are planned in 2022.	Varieties: Blauhilde, Cow Bean, horst	Edit note	
Brokkoli	+ -	In 2022 no sets of the crop are planned.	Varieties: Calinaro	Edit note	
Carrot	+	2 sets are planned in 2022.	Varieties:	not only for kids and rabbits... Edit note	
Chinese leaves	+	2 sets are planned in 2022.	Varieties: Green in Snow, Mizuna, Moutarde Rouge Metis, Red Giant	Edit note	

Crop list: each crop entry consists of a line with the crop name and it's options: "Copy crop", "Plus" button for direct set creation of this crop and delete (trashcan only displayed if sets of the crop are not planned in any year!). If no crop is open, the number of sets created in the crop year, stored varieties, and note edit on the set are displayed.

Show crop data: A crop entry can be opened and closed, by clicking in the crop name field. It shows detail view, sorted in tabs by default. If a crop is clicked on, while another is open, they will be displayed one below the other. The current (last opened) crop is always shown on top. Opening a third crop causes the top crop to move down, and bottom crop to be closed. If two crops are open, they can be edited independently and tab view (default setting at the beginning of use) or a complete view, can be selected. The last selected view (Tab or Complete) is repeated for the next crop opened.

2.3.3 Edit crop details

 Show **complete view of crop data**: The "list" icon (to the right of the crop name) opens the crop details. Data from the tabs is then arranged below each other in one view.

 **Create copy of a crop**: A crop-copy can be created by clicking on "Copy crop". The copy appears as a new entry on top of the list. It contains a new color and the name is followed by (copy).

 **Delete crop entry**: Click on trash can and confirm deletion of the entry. In the example above, the button isn't shown because both crops include existing planting sets.

 The **delete option** is only displayed for crops for which no sets are planned. Sets, created in past or future crop year plans are also considered, as these are important for complete farm documentation and statistics. If a crop is to be deleted nevertheless, the sets must first be deleted in all planned years - only then the delete button is again displayed on the crop-card!

 The "**Create set**" button next to the crop name opens set-creation window, for creating sets from the crop's master data.

 See point 3.1, Create sets

 Click on "Edit note" to open a **note field**. Set all important crop notes here.

Detail view of a crop is divided into five areas, which can be selected through the tabs Cultivation & Harvest, Crop Info, Varieties, Task templates and #tags.

2.3.3.1 Cultivation and harvest

Cultivation & Harvest

[Crop infos](#)

[Varieties](#)

[Task templates](#)

[#tags](#)

Details column: Use the "Color picker"/"Random color" buttons to select a suitable **display color in** which the crop should be shown in the crop plan and on the beds.

In the selection field **Type of feeder** you specify, whether the crop is a light-, medium- or strong feeder (how is nutrient-uptake of the crop). This allows you to control the position, the crop has in your crop rotation.

Choose the right **Cultivation type** (nursery, direct seeding, or young plant purchase) according to how the crop is grown on your farm.

In the **Security** field, enter a safety margin, e.g., 10%, for the estimated loss during the cultivation period (from bed planting or, in case of direct seeding, from germination to harvest). The buffer is added to the required plant quantity in the auto-calculation.

When using the crop type "Nursery", it is also possible to enter a **germination rate** (safety buffer for the time between protected sowing and planting on the bed) in an additional field.

In contrast to “Security”, the germination rate does not refer to failure, but represents the percentage of germinated seeds. The indication, e.g., 85% germination of the seed comes from the manufacturer's packaging or can be your own estimation.

In the **Harvest information** (second column), the harvesting method and the (estimated) required harvest quantity in the desired unit are entered.

 The **Harvesting method** describes, how a crop is harvested. Choose **Single harvest** for a crop that can only be harvested once (e.g., lettuce or head cabbage, the whole plant gets harvested in the process, then it's gone). That is, why Single Harvest can only be used with unit “piece”.

Harvest per square meter applies to, e.g., Lamb's/Baby-leaf lettuce (crops with weight unit)

Harvest per plant and week applies to crops, that are harvested repeatedly, e.g., all fruiting vegetables (tomato, pepper, cucumber, pumpkin, ...).

In case of “**Single Harvest**”, harvest quantities are specified with the "required harvest quantity per week", because the unit piece (1 piece = 1 plant) is specified and plant quantity to be cultivated and bed meter requirement already result from this.

When using “**Harvest per square meter**”, the "Expected harvest quantity" must also be entered. This is the estimated average yield *per m²* that can probably be harvested.

Also, for “**per plant and week**”, enter the “expected harvest quantity (here, the estimated average yield *per plant* that can be harvested per week).

 “**Required harvest quantity per share and week**”: If the farm is entered in the program as Solidarity Farming (farm type CSA in the program settings), the required harvest quantity per member share and week is entered. In this purpose it is necessary, as described in 5.2, to create the quantity and distribution of the shares in the customer administration.

2.3.3.2 Crop info

[Cultivation & Harvest](#) **Crop infos** [Varieties](#) [Task templates](#) [#tags](#)

This tab contains crop timing, plant spacing and transplants information.

Crop timing shows the nursery, growth, and harvest periods of the crop in weeks.

The input field “duration in nursery” is only displayed if the crop contains the cultivation type “Nursery” or “Transplants for sale”.

Plant Spacing includes the distance in the crop row, the distance between rows, and the number of rows on the bed.

Transplants information shows the size of pots/multi-pot plates used for nursery. Store pot or plate sizes by clicking on “create” behind the Multipot-Input field. This links to settings/area parameters, where all types of nursery-pots/plates used on the farm can be put in and then appear in selection menu. If this option is used, statistics for needed substrate quantity, and floor area space are available in docu&statistics.

The number of seeds per multi-pot is needed to calculate the number of seeds required for the nursery. When purchasing transplants, the number of plants per box is entered to calculate the seed and transplant order.

Different delivery weeks: By checking the box "Diff. delivery weeks" you can enter the desired number of delivery weeks (checkbox only appears for the harvesting methods "single harvesting and per square meter").

2.3.3.3 Varieties



Varieties can be added to the crops and their variety-specific information can thereby be considered in the set planning. The seed information stored in varieties is used for calculation and overview in the seed store.



Create variety: Open the menu by clicking on it. Select a variety, if available in the menu list, or enter a variety name above. Then click "create" to create a new variety entry. Click on "Edit note" e.g. to note variety properties. Finish the input with the green tick.

To **delete a variety** click on the "trash can" icon next to the variety name (stored seed data will be lost!).

Edit variety details: Open details by clicking variety-name. Select one of the boxes and put in variety-specific data. It's used when selecting this variety in crop-sets.

Details **Seed data**

Show date from previous year

+ Year of manufacture	Manufacturer	TKG	Value
2022	own germination	<input checked="" type="radio"/> 487 g <input type="radio"/>	0

Create seed data for the variety with thousand-grain weight: Click "plus" to create a new seed entry. The year of production automatically starts in the currently selected year of crop, each further entry (click on plus again) in the following year. If necessary, change the year of production, enter a seed producer or e.g., "own propagation" and enter the thousand grain weight (TKG).

TKG: stated by most manufacturers in the variety catalogue (if you have your own seed, count out 100 grains, weigh them and multiply the weight by 10). The TKG information is required for calculating the seed order quantity.

Check "Show date from previous year" box, to see seed entries from previous years. To **delete a seed** entry, click on the trash can behind the TKG field.

Other units: If you want to enter a seed quantity with weight per area, click on the "Other units" tab at the top. The entry then works exactly as for the TKG entries, except the unit selection.

2.3.3.4 Task Templates

[Cultivation & Harvest](#) [Crop infos](#) [Varieties](#) **Task templates** [#tags](#)

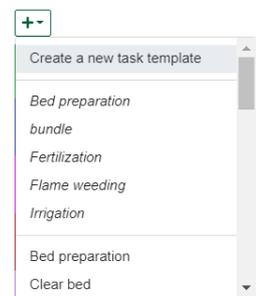
All task types that are necessary to be done for this crop are created here as templates for set planning. Each newly created set will automatically contain the tasks stored here (if "proposed value" is active). Subsequently created templates can also be transferred to existing sets in the crop plan by clicking "Transfer to sets".

 **System created tasks:** The tasks "Seeding (Aussaat) / Nursery (Anzucht) / Planting (Pflanzung)" are created as mandatory standard tasks by the program and cannot be edited or deleted.

 **Create Task Templates:** Standard task templates stored in the program and tasks already created, can be selected from the drop-down menu, which therefore has two sections. At the top templates in use from other tasks with "proposed value" activated (italicized) and below the most common tasks are to be selected.

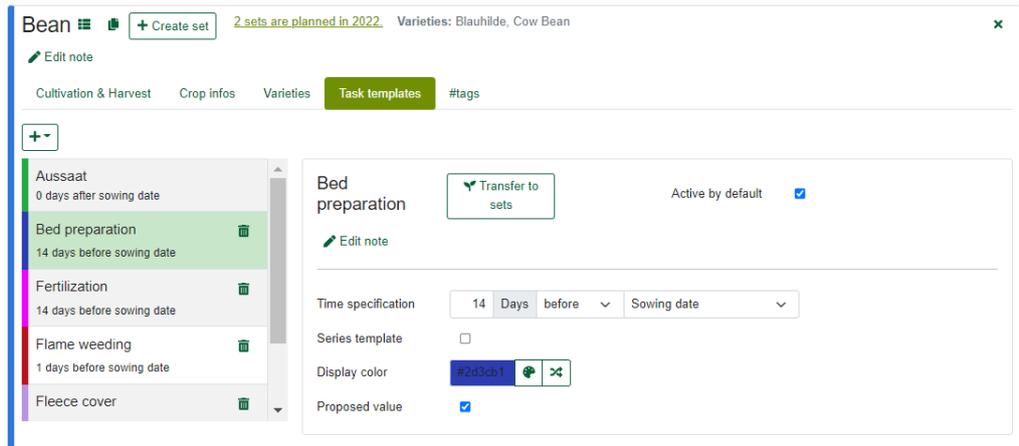
The latter are already stored with data that can be customized. All created task templates are then listed on the left. To edit one of these templates, click on it and it will open on the right.

Create new Task Template: By clicking on the plus and selecting the top menu item "create new task template", you open the editing window for a new template and can now edit all data.



Import template from proposed value: To use a template stored in another crop, click on "Plus" as well and select the corresponding task name in the upper part of the opened menu. You can remove these templates from the menu by clicking on the trash can (deactivates "proposed value" in the template).

Edit task template: If there is no name yet, enter it into the input field on the top left and confirm. You can also edit the name by clicking on it.



An existing template opens by clicking on it in the selection list on the left. The task is edited on the right. To enter a note for the template, click on "Edit note".

Time specification: Set a relative date to a reference date (number of days before or after nursery/sowing, planting, harvest date or end of crop). Assign a display color for the task using the color picker or clicking the random color button.

Uncheck the "**Active by default**" box if you do not want the template to be scheduled automatically when the crop is set.

Activate "Proposed value": If the template is to be included in the selection menu as a proposed value, check "Proposed value" box.

Series template: The task can be planned several times in the crop sets at the same time intervals; to do this, activate the "Series template" checkbox.

Transfer to sets: If you want to add subsequently created tasks to existing sets in the crop calendar, click on "Transfer to sets".

 **Duplicate tasks:** For existing sets created with templates, the task is duplicated if using "transfer to sets"-option. Duplicate tasks must be removed manually in the set details.

 **Delete task-template:** Click the trash can of the list-entry you want to delete and confirm.

 **Additional fields on stored tasks:** For documentation purposes of certain tasks, additional input fields have been created in the tasks, e.g., product name, application rate and unit for task "fertilization"

2.3.3.5 Hashtags



In this tab, you can create and delete #tags (marker words), to indicate the crop to be displayed on the crop's sets. In the crop calendar, you can then filter the set list, to show sets with specific #tags only.

Create new #tags in the input field "Assign new #tags". Enter one or more words (without separators) and confirm by pressing the Enter key. The #tag(s) will be automatically assigned to the crop.

Stored tags:

× Alliaceae × Apiaceae × Brassicaceae × Chenopodiaceae × Cucurbitaceae × Fabaceae × Solanaceae ×

assign new #tags

Selected #tags:

Cucurbitaceae ×

The selected #tags assigned to the crop appear in green. To remove them, click on the small X to the right of the name. #Tags created in the crop master data are displayed on created sets if they were not removed during set creation. Tags created from the crop cannot be deleted from sets! To be able to delete #Tags used temporarily or at the single set, create them directly at the set.

see point 3.4.4.3, "Notes and #Tags".

2.4 Fields

Planning ▾ Fields

To enter and store master data for your cultivated areas, open the fields (and plots) overview in the navigation bar by clicking on Planning/fields. The farm areas can be assigned to the sets of the crop plan here.

2021																				
Bed / CW	Jan				Feb				Mar				April				May			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
01 Greenhouse1	1 Plots - 1.200 Bed meters / 1.440 m ² Beds Without pathways / 351 m ² Pathways / 0,3 m Pathway width / 1.791 m ² Total																			
02 Greenhouse2	40 Beds - 1.200 Bed meters / 1.440 m ² Beds Without pathways / 351 m ² Pathways / 0,3 m Pathway width / 1.791 m ² Total																			
03 Tunnel1	8 Beds - 240 Bed meters / 180 m ² Beds Without pathways / 63 m ² Pathways / 0,3 m Pathway width / 243 m ² Total																			
04 Tunnel2	8 Beds - 240 Bed meters / 180 m ² Beds Without pathways / 63 m ² Pathways / 0,3 m Pathway width / 243 m ² Total																			
05 Alliaceae	8 Beds - 80 Bed meters / 60 m ² Beds Without pathways / 27 m ² Pathways / 0,3 m Pathway width / 87 m ² Total																			
06 Brassicaceae	12 Beds - 120 Bed meters / 90 m ² Beds Without pathways / 39 m ² Pathways / 0,3 m Pathway width / 129 m ² Total																			
07 Field1	2 Plots - 600 Bed meters / 720 m ² Beds Without pathways / 180 m ² Pathways / 0,3 m Pathway width / 900 m ² Total																			

The fields-view contains an **additional year switcher**. It works independently from the year selection in the main bar. A change in the main bar will change fields switcher synchronously.

The main navigation bar contains an additional button **"Split screen"** (to the right of the year switcher) in the field view. Clicking this button displays two field views next to each other. This can be used to compare the acreage occupancy of two seasons, or you can open the following year to the current season and display the over-year sets completely. If split is active, the main year switch is hidden and a year switch appears in each screen. To close the second view, click on the split button again.

Manual sync: The screens are not automatically synchronized when changes are made, use the refresh button at the top left, if necessary.

Other options in the “Fields”-navigation bar:

-  **"Update"** to manually apply changes to fields and beds.
-  **Create new field:** Create a new field and plan beds and paths on it.
-  **Set Bed Planning:** Open the sidebar to view all sets planned in the Crop Calendar that have not yet been distributed to beds and add them to the beds of your choice.
-  **Fields filter:** Filter your fields for a better overview in the field list.
-  **Excel export of all fields:** Export your field views to an Excel spreadsheet.
-  **Open/close all fields:** Opens the overall view of all fields and plots.

2.4.1 Fields overview - fields, plots, and beds

To represent your farm’s area division in detail in the program, you can create the areas by plan sizes field, plot, beds. A field can be divided into plots. Fields/plots contain beds.

01 lakeside	12 Beds - 120 Bed meters / 90 m ² Beds Without pathways / 52 m ² Pathways / 0,4 m Pathway width / 142 m ² Total
02 forest	0 Beds - 0 Bed meters / 0 m ² Beds Without pathways / 0 m ² Pathways / 0,4 m Pathway width / 0 m ² Total
03 old field	2 Plots - 425 Bed meters / 366 m ² Beds Without pathways / 198 m ² Pathways / 0,4 m Pathway width / 564 m ² Total - It is too old, melioration necessary!

 **Create field:** By clicking on "Plus" a new field is created. Each field is displayed as a line in the field overview with name and information about the area. You can also see, how many plots and beds the field comprises and the area of the beds and paths.

03 old field	2 Plots - 425 Bed meters / 366 m ² Beds Without pathways / 198 m ² Pathways / 0,4 m Pathway width / 564 m ² Total - It is too old, melioration necessary!
old field - Plot1	3 Beds - 125 Bed meters / 141 m ² Beds Without pathways / 66 m ² Pathways / 0,4 m Pathway width / 207 m ² Total
old field - Plot2	10 Beds - 300 Bed meters / 225 m ² Beds Without pathways / 132 m ² Pathways / 0,4 m Pathway width / 357 m ² Total

If plots have been created, they are displayed as a light blue line in the plot overview. By clicking on the grey line of the superordinate field, you can expand or collapse the plots. The number of beds as well as bed and path area dimensions are also indicated on the plot’s line.

Moving of fields and plots: By left click and holding on the three dots to the left of the entry, you move a field to the other, where it is then subordinated as a plot. In the same way, plots can be subordinated to fields. The sub-plots created, can be pre-planned for crop rotation elements of the same size and number of beds. This gains a possibility of moving entire crop rotation elements to other fields.

 **Create plot:** To create a new plot in the field, click on the field name and on the "+ plot" button on top of the field details sidebar. If only one plot is created, it will take up the entire field area; if there are several plots, each sub-area of a plot can be created on the field as large as desired by defining the number of beds and each bed’s size.

Show beds: If beds have been created in a field or plot, they are displayed in separate lines below by clicking on the field/plot description. To expand a plot with beds, click on the plot description. The beds are shown in striped lines in white and green.

Edit field/plot details:

Clicking on the name of the field will open the field detail sidebar. To close, click on the name again, or on the small X in the upper right corner.

A new plot can be created in the field.

The plot sidebar behaves exactly like the field sidebar, except for the option "Turn plot into a field".



Turn plot into field: You can break up a plot and turn it back into a field by clicking the "arrow up" button at the top of the sidebar.



Delete a field/plot: Click the "trash can"-Button and, if you are sure, confirm.



Deleting fields: Fields and plots can only be deleted, if no crop sets are planned on the beds. Past years and subsequent years are also considered here! For documentation reasons, think twice. The past years planning will be lost!



Create set: Sets can also be created in the sidebar of the field or plot, for example, to fill up a planned field, that is almost full.



Field-Excel-Export: Click on "Field xlsx" to export an Excel table of this field, with all beds and sets on it.



Edit field details: In the "Field" tab, enter the name of the field in "Description". Select, whether the area type is outdoor or protected (tunnel, greenhouse) and change path width, if it differs from default.



Enter the number of beds to be created and their dimensions. Then click on **"Create new bed"**. By repeating bed creation process, you can add more beds with any dimensions to the field. In this way, beds can be planned on areas with uneven side lengths.

Click on a field name to open the bed view. It's displayed in the field table, in an own sidebar.



Delete beds: Click the dropdown arrow on the right and select the beds in question by clicking the checkbox. Click on delete "marked" beds.



Tasks on the field: Create the tasks for the field or individual beds here, by clicking the "Plus"-Button on the field- or bed-card.



Field Notes: For field documentation in the season, simply click in the input field and make a note. Created notes are shown in the field overview line in the field information.

2.4.2 Beds overview



Open the bed view: Click on a grey line in the field list. If beds have been created in this field, they are now displayed line by line in the bed overview. To the left of each bed, the bed number or name and the bed length are shown. Planned sets are displayed as colored bars on the beds. The set-bar thickness is halved for mixed crop sets (sets planned on the same bed at the same time), as these are displayed together in one row.

2.4.3 Bed detail view

Open bed details: Click on bed number/or name, (in bed row on the far left) to open the bed detail sidebar. Here you can **rename beds**, change the bed **dimensions** bed length and width, and **move sets** located on the bed. For the latter, select the new area, then the new bed and click on the "Move sets" double arrow.

The bed occupancy under the bed data shows the months on the X-axis and each column shown below corresponds to a calendar week. In the left column the bed meters are displayed line by line from top to bottom. The sets are shown as color-squares over the growing period on the bed. To close the bed detail view, click in the bed line or on the small X at the top right.



In the illustration, bed 29 (length 30m) has a set of lamb's lettuce until the end of April, then a set of tomatoes from May to the end of September, and from the beginning of October a baby leaf lettuce, each planned from the first bed meter. The bed is fully occupied with all sets, as these exceed the total length of the bed (can be seen from the set bar above: 30 meters each of 120/300/200 bed meters total set length).

 **Simultaneous sets or mixed crop:** When planning several sets with temporal overlap or mixed crop on the bed, the crops are displayed superimposed. Then drag the mouse pointer onto the set to display a marker.

2.4.4 Bed occupancy with planned sets

 Click "Add sets" in the field overview. The "Add planting sets" sidebar opens. It contains a list of all sets that have not yet been assigned to a bed, sorted by calendar week (CW) and year. It also contains parts of sets, that did not fit completely on a field.

   The set list can be filtered, and additional sets can be created.

 See point 3.1, Create sets

The X on the right, closes the sidebar.

The list shows all the sets planned in the crop calendar. You can select them, to assign them to one or more beds. Either drag and drop a set from the list to the desired position of a bed or enter the position in the "Start bed & position" selection and assign set to the bed(s) by a Click on the list entry of the set.

+ Create sets
×

Add planting sets

Field

Starting bed & position m Plan from front to

Keep planning on the next beds

Manually set planning length m

Planning length m

CW 2023 - 15

- Chinese leaves 1 (2023) (99.620 m)
CW 15 - CW 22
🔍 🗑️
- Asia Salat 3 (2023) (1.064 m)
CW 15 - CW 23
🔍 🗑️
- Möhre 6 Dolciva (2023) (90 m)
CW 15 - CW 35
🔍 🗑️
- Paprika 1 (2023) (155 m)
CW 15 - CW 35
🔍 🗑️

CW 2023 - 16

- Wirsingkohl 1 Smaragd (2023) (286 m)
CW 16 - CW 33
🔍 🗑️

Adding sets to beds: Using drag and drop (holding down the left mouse button), you can simply drag the set to the bed you want to plan it on.

The selection of "Field" must first be used to choose the field or plot (plot with two underscores in front of the name) for the "Click"-method. You can also click on the name of the field or plot in the table.

Before clicking on the set, always make sure the correct field is selected. If a field contains plots, you can only select beds on them; the field no longer contains any beds.

You specify start bed, start position and planning direction under the field/plot selection.

The selection "Plan from front to back" is the default. Switch to backward if you want to plan the set from back to front on one or more beds.

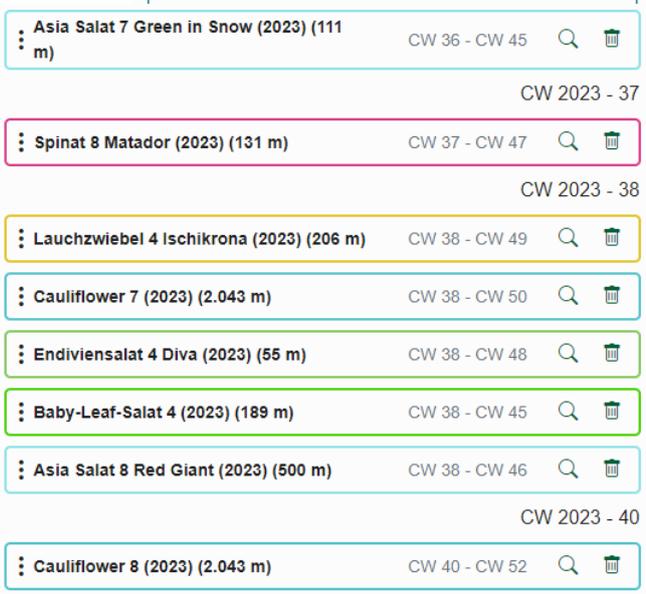
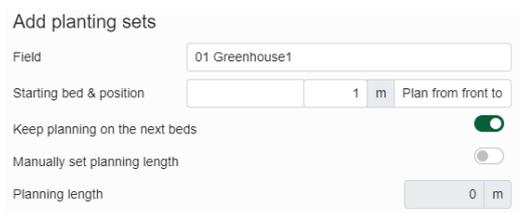
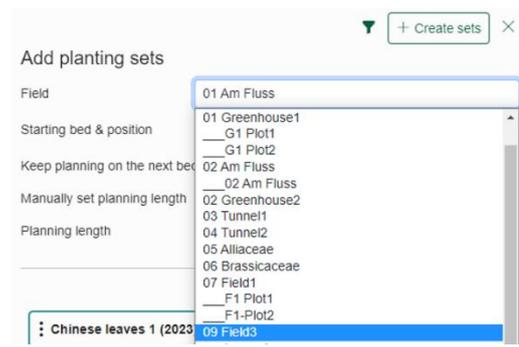
If the set length exceeds the bed length, it is automatically planned on the next bed (depending on the selected direction) if one is available.

Occupancy single bed/with manual set length: If you only want to plan on one bed, switch off "Keep planning on next beds" by clicking the slider. To plan a manual length, activate "Manually set planning length" and enter the length under "Planning length".

Set list: edit sets and allocation of beds: All sets already planned in the crop calendar, which are not yet assigned to a bed, are listed. Parts of sets that are left over as the remainder of a bed planning, are also listed. Hold the mouse pointer over the set to display a tooltip with the data overview.

To view or change details of the set, click the magnifier icon. Use the trash to delete the set from the crop plan.

If a yellow warning triangle is shown, the set contains missing data. For example, no bed meters were specified, or not calculated. By clicking on the set, it cannot be planned on a bed and an error message appears. To fix it, open the set details by clicking on the magnifying glass symbol on the set, where the missing information (yellow bordered input fields) can be added.



Filtering sets for the bed layout: Open filter by clicking on the "funnel" icon (top right). Here you can sort the set list by calendar weeks and crops and select by period, crops, crop type and #tags.

Follow-up sets from field: This filter option shows all sets that were created as a copy of sets of the selected field/plot from the previous year. For example, 12 lettuce sets were grown on the field "Tunnel1" in the previous year. The option "Copy sets to new year" was applied to the entire crop plan of the previous year in the Micro-Farm Planner. If the current year is now selected in "fields"-section and the "Follow-up sets from field" filter is selected for the "Tunnel1" field, the sidebar displays the 12 lettuce records for the new season. These can now be planned onto a new area.

The image shows two panels from a software interface. The top panel, titled "Filter and sort", contains several dropdown menus and input fields: "Sorting" (empty), "Sort by Calendar week" (with two "1 CW" buttons), "Crop" (dropdown), "Type of feeder" (dropdown), "Follow-up sets from field" (with a selected "03 Tunnel1" tag), "#tags" (dropdown), "#exclude tags" (dropdown), and "and" (dropdown). At the bottom of this panel are "Reset filter" and "Close filter" buttons. The bottom panel, titled "Add planting sets", contains: "Field" (input with "01 Greenhouse1"), "Starting bed & position" (input with "1 m" and "Plan from front to"), "Keep planning on the next beds" (checkbox checked), "Manually set planning length" (checkbox unchecked), and "Planning length" (input with "0 m").

Click on "Close filter" to confirm your selection and close the window.

 The filter will appear in light green when activated. To reset the filter and restore the default view, click "Reset filter" at the bottom of the filter window.

2.4.5 Edit sets on the bed

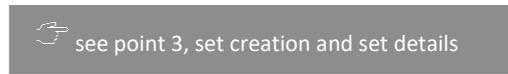
Click on the crop name, displayed in the middle of a set bar, to open the options menu for editing the set. Here you can call up the stored set data under "Details". Click "Remove from bed/field/all fields", to remove the set from the bed/ from the field/ from all fields. Select "Delete set completely" if you wish to delete the entire set (set will be removed from the crop plan completely, not only from the field!).

The image shows a table representing a crop plan. The top row is a header for "01 Greenhouse1" with summary statistics: "1 Plots - 1.200 Bed meters / 1.440 m² Beds Without pathways / 351 m² Pathways / 0,3 m P". Below this is a row for "G1 Plot1" with "40 Beds - 1.200 Bed meters / 1.440 m² Beds Without pathways / 351 m² Pathways / 0,3 m P". The table contains several rows of set bars. One set bar is highlighted in yellow and has a context menu open over it. The menu options are: "Details Set", "Remove from the bed", "Remove from the field", "Remove from all fields", and "Delete set completely". The set bar itself shows a crop name "Lauchzwiebel 1 (15m/ 150m)" and a crop type "Baby-Leaf".

By removing it from the bed/field/all fields, the set reappears in the set list. It can be planned on a new area. The delete-option deletes the set in the crop calendar completely!

Set details

If a set occupies a bed, changes can be made to the set at any time by clicking on "Details Set" in the menu. This opens the set sidebar for editing the set data.



Moving the set on the bed: If, for example, set dates change due to weather conditions, a set can be moved to the correct week on the bed using drag and drop. To do this, click on the set bar and keep the mouse button pressed. Now drag the set bar to the desired calendar week. Be sure to remain in the row, the set has been located. All details and dates of the set will be adjusted automatically. The shift is carried out synchronously in the crop calendar.

Moving the set to another bed: If you want to move a set to another bed, you can also do this by drag and drop. Click on the set, hold down the mouse button and drag the set vertically to the intended bed row. Release the mouse button there.

Shifting across fields:

To do this, no sidebar must be open in the field view. Open both fields and drag the set from the bed of one field to the bed of the other field.



Move plot to field/convert plot to field: For example, to move entire plots to another field (i.e. for crop rotation of the following years) an entire plot with sets on it, can be moved to another field, using drag and drop. To do this, click on the three vertical dots on the far left of the field/plot.



To make a plot a field, open the plot details sidebar and click the up-arrow button "turn the plot into a field" next to the plot name.



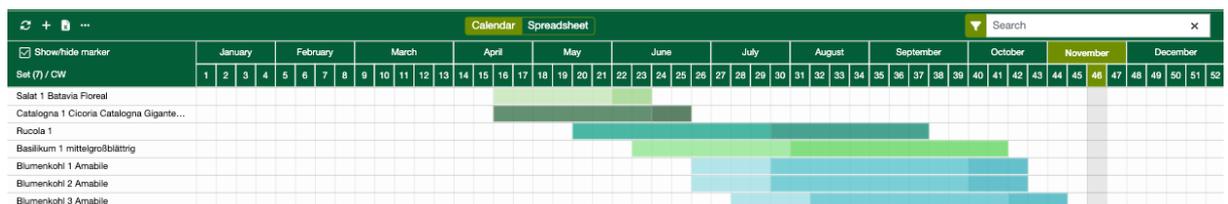
3 Crop calendar



You can access the Crop Calendar by clicking on the icon in the navigation bar or the "Show Crop Calendar" button in the Dashboard. The Crop Calendar view shows the crop plan with all planned sets for the selected season (year shown in the navigation bar).



Click on the selection arrows to choose a previous or following year to be displayed in the crop calendar.



The **graphical crop plan** contains the crop and variety names of the sets on the left. The timeline is shown in the table-header, with months and calendar weeks (CW). The current month and calendar week are highlighted. Clicking on the week opens the calendar week statistics.

Sets are shown as colored bars with either one (grown transplants for sale), two (direct-seeding crops and ordered transplants – seeding/planting and harvest) or three time periods (sets with grown transplants – nursery, growth, and harvest).

 **Show/hide marker** Markierungsspalte anzeigen um Sätze für Aktionen auszuwählen

Crop calendar

 „Reload“ to show edited planned sets.

 „Create sets“  see below point 3.1 „Create sets“

 **Spreadsheet crop calendar export:** Create a spreadsheet export of your entire or filtered crop calendar view. Click on “export crop calendar” to print your crop calendar directly from a spreadsheet.

 **Actions to edit sets:**  see also point 3.4, „Set actions and bulk actions“

General info		Crop timing				Cultivation Information		Plant spacing (cm)				
Description	Variety	Cultivation type	Nursery (CW)	Plant/Sow (CW)	Harvest (CW)	Harvest time	Number of plants	Bed meters	Distance in	Between	Rows	Multi
<input type="checkbox"/> Salat_1	Batavia Floreal	Direct seeding		16	22	2	34	2	30	30	5	
<input type="checkbox"/> Catalogna_1	Cicoria Catalogna Gigz	Transplants purchase		16	24	2	1	1	25	25	1	
<input type="checkbox"/> Rucola_1		Direct seeding		20	30	8	27	1	15	15	4	
<input type="checkbox"/> Basilikum_1	mittelgroßblättrig	Transplants purchase		23	31	10	64	6	25	25	3	
<input type="checkbox"/> Blumenkohl_1	Amabile	Nursery	26	30	40	2	53	9	40	40	2	
<input type="checkbox"/> Blumenkohl_2	Amabile	Nursery	26	30	40	2	53	9	40	40	2	
<input type="checkbox"/> Blumenkohl_3	Amabile	Nursery	28	32	42	2	53	9	40	40	2	

Access the spreadsheet view by clicking on the button „spreadsheet“ (in the middle, top position). Instead of the usual calendar view, it shows the underlying data of all planned sets.

 **Show/hide columns:** Selection of the table columns to be displayed.

3.1 Create sets

 **Create sets** in the Crop Calendar, by click on "Plus" icon at the top left. Select a crop from “own crop” section of the dropdown menu. If you want a crop not available under “own crops”, choose one from the bottom “template” sections or enter the name at the top and click “create”. This opens a window for crop master data creation. Enter or adjust the data and press “Continue”. This saves the master data in the crop section and leads you to the set creation window.

Create sets

Choose crop x v



Use crop templates: You can only create sets once you have stored the crops grown in your farm in the program! The crops (templates) can be created quickly during planting set planning.

Crop data and planning settings for the new sets are displayed here. First select the number of sets you want to create. Then choose the start-date and select a start point from sowing/breeding/planting/harvesting date). Select a variety if you like. Check and, if necessary, change the preset crop data.

Continuous harvest or weeks in between: When creating multiple sets, the "Continuous harvest" option is active by default. This means, the harvest end of the first set is scheduled as the harvest start of the second set, and so on. Uncheck the box if you don't want to schedule the sets with Continuous harvest. An input field for the "Number of weeks in between" appears. Enter the time interval between the harvests of the sets in weeks manually.

Create sets for Cucumber

Number of new sets	<input type="text" value="2"/>
Planned date	Nursery ▼ 28.01.2022
Cultivation type	Nursery ▼
Variety	<input type="text"/>
Continuous harvest	<input checked="" type="checkbox"/>
Security	<input type="text" value="10"/> %
Germination rate	<input type="text" value="85"/> %

Security and germination rate: The security indicates the estimated plant failure during the bed culture. Starting from 0%, a percentage is added to the required number of plants of the set (e.g., 15% more than required).

The germination rate is also a safety buffer in planning for crops, of which transplants are grown on the farm itself. It assumes 100% (=100% of the seed germinates). In the case of purchased seed with a germination capacity specified, this value can be adopted (e.g., 85% germination rate). Otherwise, an experience/estimate value should be entered, or a germination test should provide information on the germination capacity of the seed. The seed/transplants quantity is increased accordingly to compensate for the failure.



see point 2.3.3.1, Cultivation and harvest

Now select the desired harvesting method that suits the crop. For the harvesting methods "per m²" and "per plant and week", an additional input field "Expected harvest amount" appears. Enter the estimated yield of the crop per m² or per plant and week here. Enter the required harvest quantity per week (for CSA quantity per share and week) next. If an additional harvest quantity is to be planned, fill in the field "additional harvest quantity".

CSA only: Operated with system "Market-Garden" or "Commercial vegetable growing", the calculation of the number of plants and bed meters is always displayed. With "CSA" the calculation is based on the number of member shares. To display the plant and bed meter requirement, activate the box "Assign quantities yourself". Activate "Additional crop quantity" if, for example, the crop is still to be grown for another sales channel.



Calculation of plant quantities and bed meters are carried out automatically from the crop data and displayed by a green calculator. To check the calculation, hold the mouse pointer over the number field "Number of plants" or "Bed meters". A tooltip window appears with the calculation method and explanations of the current calculation.

 **Manual entry of number of plants or bed metres:** If required, one of the values can be freely assigned when creating the set. For sets already created, a change can be made in the set details. The calculator symbol turns yellow and the input field containing the manual value is framed in blue, if a manual entry exists.

Cultivation information

Number of plants 3 (2,8) Multi-pot plates 

A click on the calculator triggers the automatic calculation and replaces the manual input (calculator is green).

If you do not want the number of plants and bed metres to be calculated automatically, ((CSA only:) click on the box "Allocate quantities yourself" and) enter your planting quantity or the bed meter requirement manually.



Selection of a default bed length: Select half, whole or multiple of the bed length that is stored under Bed length (default) in Settings/Area parameters.

100 

- Bed length (default)
- ½ Bed length
- 1x Bed length
- 2x Bed length
- 3x Bed length
- 4x Bed length
- 5x Bed length

In the example the bed length (default) is 50m. To create a set for two beds, click on "2x bed length" in the selection menu and plan the set for 100 bed meters.

- Farm information
- Profile
- Area parameters
- Co-worker
- Order Processing 1
- Modules
- Roles and rights

Bed settings 

Bed width (default) m

Bed length (default) m

Pathway width m

Time in nursery and crop periods: Plan sets with time in nursery, that match the season. The crop time is only displayed for sets with nursery on-farm.

Time in nursery Wochen

Growth Wochen

Duration of harvest Wochen

Diff. in delivery weeks 

Delivery weeks

Different delivery weeks: When selecting the harvest method "single harvest" or "per m²", click on the box "Diff. in delivery weeks" to enter a number for the delivery weeks deviating from the harvest duration. This can be useful if storage harvesting with longer-term delivery is planned (e.g., storage cabbage: 1 harvest week, 20 (diff.) delivery weeks planned). Then the harvest requirement is calculated with the 20 weeks and not with the harvest period of the set. Another example could be an asia-salad, which is cut and delivered 3 times in six harvest-weeks.

To (de-/)select **task templates**, that should (not) be assigned to the set, (de-/)activate the box at the displayed task templates (not possible for the standard tasks "Sowing", "Growing" and "Planting" generated by the program).

To (de-/)select **task templates**, that should (not) be assigned to the set, (de-/)activate the box at the displayed task templates (not possible for the standard tasks "Sowing", "Growing" and "Planting" generated by the program).

#Tags Below that, you can mark your set with new or already used keywords ("hashtags" or "#tags"). This facilitates grouping, sorting and quick finding of the sets in the crop and task calendar. If #Tags have already been created in the crop, they will be adopted here.

Once all the details have been entered, click on "create" at the bottom. The sets are created in the crop calendar. Click X to cancel set creation.

3.2 Crop Calendar Filter & Sort

 Use the **filter** to sort the sets in the growing calendar. Select various criteria to display only certain sets. To do so, click on the funnel icon.

Sort the crop calendar view and/or set the filter according to your wishes. Select your criteria by opening the drop-down selection. To do this, first click on the down arrow on the right, activate the desired filter entries then and close the menu by clicking on the free space below the buttons.

Reset any filter option by clicking on the “X” next to the dropdown arrow.

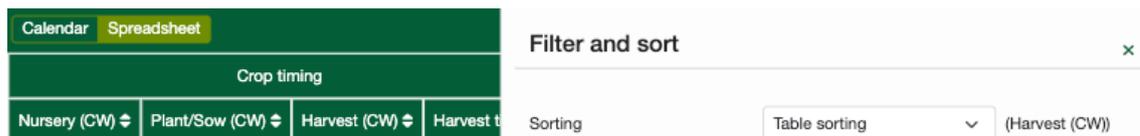
 If a filter function is active, the filter symbol appears in light green! To restore the default view, click on "Reset filter" in the filter window at the bottom right.

Close the sidebar window by clicking on the green “X” on the right.

Sorting is by date of sowing/planting by default. Sorting options are:

- alphabetically by planting set name
- by crop
- Harvest date
- Sowing/Nursery date
- Sowing and planting date

If you use any of the table columns for sorting your set list, the sorting option “table sorting” will be activated according to the selected column header.



 **Sorting the set planning:** The light green filter is *not* activated, if all sets are still displayed and the view in the filter window has only been *sorted* differently!

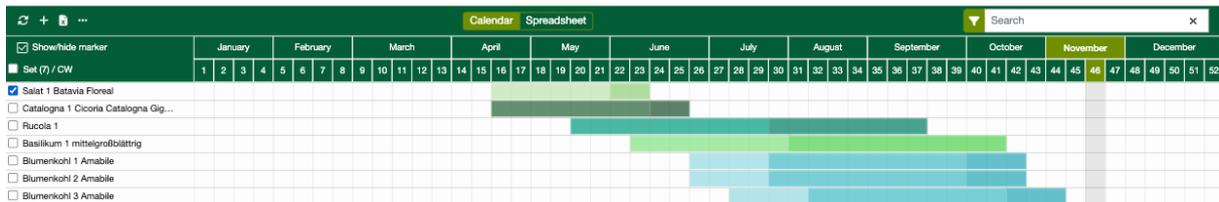
Filter options are:

- From calendar week X to calendar week Y (CW), with limitation to nursery, sowing/planting, nursery/direct sowing/planting or harvesting
- Crop(s)
- Type of feeder (Heavy, Medium, Light)
- Planning status - display of all sets with/without bed allocation or without bed meters
- Variety assigned - Display sets with/without variety assigned

- Cultivation type of the sets (nursery, direct seeding, transplants purchase, crop for sale)
- Field - Display all sets assigned to a selected field or plot
- #Tags - Display all sets with the specified #tags; and/or toggle to display sets with #tags 1 and 2, or #tag 1 or 2.

This week Entire year To filter by current week or year, click "This week"/"Entire year" buttons.

3.3 Edit the crop plan



3.3.1 Move sets - crop time changes via drag and drop

Moving sets to change time-periods: To move a set, click on a colored set bar. Hold down the left mouse button and move the set to the left or right up to the desired calendar week. All crop periods of the set will be adjusted automatically. Please be careful to click in the middle of a colored field to avoid accidentally changing.

Change crop times of sets: The crop time periods of a set can also be changed by drag and drop. To do this, click on the transition area of two color-parts using the left mouse-button, hold it and move to the left or right to change the period week by week.



Set tooltip: Hold mouse pointer over a set name to obtain an overview of the set data. The tooltip shows the set and variety name on top, then number of plants and bed meters. Next the crop periods, followed by crop data, assigned beds, crop distances and nursery.

3.3.2 Calendar Week Statistics

Click on a calendar week number to open the week statistics. The selected calendar week is displayed in the upper left corner. Switch the weeks with the arrow buttons forward/backward.

In the case of the CSA type, the current number of member shares in this week is displayed to the right.

Below that, you can see the current weekly statistical data of the crop plan for the sets and planned areas.

CW 13 76,6 Shares			
	Sets	Planned Area	Area Total
Bed meters:	252.219	296	109.574
Net surface area:	302.662,8 m²	355,2 m²	130.174,8 m²
Capacity used of bed:	232,5 %	0,27 %	
Number of sets:	67		
Multi-pot plates:	56.645,83		
Surface area in the nursery:	9.389,67 m²		
Sets in harvest:	13		

	Planned CW 13	Harvested CW 13
Set (13) ↓	Per share ↓	Total ↓
Porree 4 Shafton F1 (2022)	2 Piece	451,85 Piece
Feldsalat 7 Granon (2022)	0,2 kg	45,33 kg
Kohlrabi 1 Rasko	2 Piece	1.041,42 Piece
Lauchzwiebel 1 Ischikrona	10 Piece	2.466 Piece

In the tabs nursery, sowing/planting and harvesting all planned sets are displayed in the list with the corresponding cultivation period and specific data in the selected week. Summarized in one table, the All sets tab shows nursery, sowing/planting and harvest sets of the selected week.

3.3.3 Open set details

Click on the set name, or the colored set bar, to open the sidebar with the current set details. You can view and edit the data here. Clicking on a free space in the crop calendar window closes the sidebar. To change into the details of another set, click the next set-bar.

The sidebar shows the set name in the upper left corner. The name is linked to the crop master data. By click on the name, you get in the Crops-Section of the program to check or edit master data of the crop. Get back in the Crop Calendar by click on the Button in the Header.

    On the right, the actions (delete set, copy to next year, create copy with continuous harvest, copy) can be carried out for this set.

 see point 3.4, actions at planned set

The sidebar is divided into the four tabs "Set", "Tasks", "Notes & #Tags" and "Stock Change". The tab "Set" contains the current data for the planned set. The "Tasks" tab lists existing tasks and new ones can be created. In the "Notes & #Tags" tab you can write down notes about the set. The "Stock Change" tab displays the inventory movement (input, output, reject) of the set and allows scrap to be removed using the "Delete Remainder" option.

3.3.4 Edit Set Details



The detailed view of the set contains all the planning data specified when the set was created. In addition, there are data and links for area planning if the set is already assigned to beds. These and other input values can be adjusted and changed here.

3.3.4.1 Set data

Crop timing: In the section crop timing, the starting time of crop, if applicable, direct seeding or planting and harvesting and the harvesting period in weeks are indicated.

Cultivation information: Here, the program automatically calculates the number of plants and the required bed metres. These values are intended to match the required harvest quantity and the planned delivery weeks from the crop information of the set. Alternatively, the number of plants and bed metres can be entered manually.

 **Manual input of the number of plants or bed metres:** If required, the number of plants or bed metres can be freely assigned when creating the set or, for sets that have already been created, these parameters can be changed in the set details. The calculator symbol on the right is then displayed in yellow and input field is outlined in blue. In the tooltip (hold the mouse pointer over the input field), you can check, whether the calculation was done manually or automatically and the calculation path.

Number of plants 

A click on the calculator triggers the automatic calculation and replaces the manual input, the calculator symbol then appears in green.

 After quantity changes to the set, the calculation can be updated by clicking on the calculator symbol displayed in yellow as a result. After the automatic calculation has been carried out, the calculator appears green.

 Selection of a default bed length: Select half, whole or multiple of the bed length that is stored under Bed length (default) in Settings/Area parameters.

In the example the bed length (default) is 50m. To create a set for two beds, click on "2x bed length" in the selection menu and plan the set for 100 bed meters.

100 

- Bed length (default)
- ½ Bed length
- 1x Bed length
- 2x Bed length**
- 3x Bed length
- 4x Bed length
- 5x Bed length

Use "**Enter field planning**" to switch on a selected field or plot and plan the edited set on a bed. By selecting a field or a plot in the dropdown-menu, you can go directly to the field view and, depending on the size of your set, cover one or more beds.

 see point 2.4, fields

If the set is already planned on a field, the planned beds appear in the set sidebar below the selection field "Enter field planning". Click on the field name to open the bed-view. Click the trashcan, to remove the set from the field.

Field G1 Plot1:	On bed 13, from meter 1 to 30 m long.	
Field G1 Plot1:	On bed 14, from meter 1 to 30 m long.	
Field G1 Plot1:	On bed 15, from meter 1 to 30 m long.	

Harvest information: Harvest quantities are to be indicated in the case of single harvest and per m² with the required harvest quantity per week (for farm type "CSA" per share and week). In case of harvesting of crops with recurring yield "per m²" and "per plant and week", in addition to the required quantity, the expected harvest quantity per week must be indicated.

 **Harvesting methods:** How is the crop harvested? **Single harvest** is set for a crop that can only be harvested once (e.g., lettuce, head cabbage - the whole plant is harvested in the process and is then gone), only unit pieces (pcs.)! With a single harvest **per square meter**, e.g., lamb's lettuce is harvested (harvest unit in weight). One harvest **per plant and week** applies to crops that are harvested several times, with time interval in between (e.g., fruiting vegetables tomato, cucumber).

With the option **diff. in delivery weeks**, you can enter a different number of delivery weeks, which will be considered in the plant quantity calculation instead of the harvest weeks. The box only appears for single-harvest methods (plant is gone after harvest (single harvest and per m²), not for "per plant and week")!

The option **additional harvest amount** is only available for operating system "CSA". An additional harvest quantity can be planned in addition to the CSA quantity enabling this option.

 see point 2.3.3.1, Cultivation and harvest

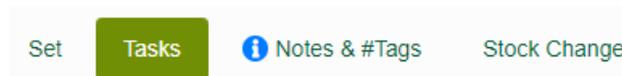
Plant spacing: The information on "Plant spacing" includes the distance in the crop row, the distance between rows and the number of rows on the bed.

Details: Data of the set consist of the variety information, the type of crop (whether the crop is sown, nursery grown on the farm, purchased from a transplant-grower or grown for sale of the transplants).

A percentage safety margin can be specified for the estimated loss during the crop period in the "Security"-field. This is added to the total number (minus loss) when calculating the number of plants. If the cultivation type "nursery" is selected, the germination rate of the seed must also be entered in %.

Nursery information: When growing transplants on your own, specify the standard size of the multi-pot plates and the number of seeds per multi-pot. For example, for lamb's lettuce in a 4-count press pot (150 pots per box), 150-count multi-pot plates should be specified with 5 or 7 seeds per pot. For pot crops, (e.g., basil), multiplate size = 1 and 10 seeds per pot can be indicated.

3.3.4.2 Tasks



The Tasks tab lists all crop tasks associated with the set, that was created under Task Templates in the Crop System. Sowing and Planting or Growing and Planting tasks, are created automatically from the set, cannot be deleted, and are always displayed.



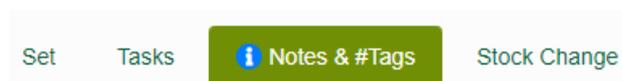
Create a new task for the set by clicking on the "Plus" sign.



With the "trash can" button you can delete all tasks you have created yourself.

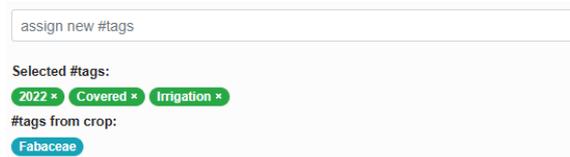
Each task contains an overview of the set next to the date and name. A click on the line of the task opens the task editing window.

3.3.4.3 Notes and Hashtags



Note field: Click in the field to create an entry. The field saves automatically. If a note exists, a blue info-sign "i" is displayed on the tab.

Create/assign hashtags: By clicking on an existing #tag, you assign it to the set. A new #Tag is created by automatic assignment, by entering it and confirming, pressing Enter.



Already assigned #Tags appear in green. You can delete them with a click on the small X on the right of the name. Under #Tags from crop the #Tags are indicated, which are deposited in the crop master data. These #Tags, shown in blue background, can be deleted also only in the crop master data, however not at the set.

3.3.4.4 Change in stock



All receipts and issues of the deliverable harvests and the rejects-quantities are recorded in the **Stock Change tab**.

The upper "total" table shows the summed values of the set from the lower table. The columns from left to right contain the A-stock (Available stock = Deliverable), Input (Harvest entries), Output (Deliveries) and Reject (Remainder deleted).



Delete remainder: If the remainder of a set's stock goes to compost, the quantity can be deleted from the set's inventory here.

Select the deletion date in the date field and enter the reject quantity. Click on the green tick to carry out the deletion. The deleted quantity will now be listed in the inventory change list in the right column "reject" on the specified date. The quantity can be corrected in the list (click in the field and change the value) or if accidentally deleted, it can be brought back into the inventory by using backspace and delete the scrap quantity from the field. The correction of the input/output must be made in the corresponding harvest entry/delivery.

The **stock change table** (below) contains the input, output and reject with the execution date.



A filter option can be found on the right above the table, for clearly displaying certain columns or time periods.

3.4 Actions at planned set and bulk processing

Using **set actions**, you can copy or delete planned sets or modify them using several options. Besides editing already planned single sets (as described below point 3.3.3.), you can also **multi-process several sets at once (bulk processing)**.

Chose sets for modifications: In the graphical crop calendar view, the multi-select column must be open to select records (multi-select is always displayed in the table view). To do this, click on the "Show/hide marker" box. Now select the records to be edited.

Select/deselect all sets: Click in the top box. Select several contiguous boxes: Check the desired topmost record. Now click the lowest record to be selected while holding down the SHIFT key. All records in between will be selected.

 Click on the 3-dots icon. The set actions sidebar opens. If no sets are selected for editing yet, "0 sets selected" is displayed at the top. If there is a number there, the corresponding sets have been selected.

Once the desired sets are selected click the button for the action to be performed.

Delete sets: To delete one or more sets, select them and click on the "trash can"-icon. Confirm the security prompt. The action cannot be undone!

Copy to the next year: Mark individual or all sets and click "Copy to next year".

Plan for a continuous harvest: Create set copies of one or more selected sets which harvest period(s) follows that of the source set(s).

Copy selected sets: Create an exact copy of one or several sets, the automatic enumeration of the sets will be adjusted accordingly.

Recalculate sets: Number of plants and bed meters of marked sets are recalculated.

Other general actions are: round up/down growing plates or plant boxes, move sets, change growing periods or start week day.

Other actions: Under "Change values for multiple sets" further actions can be (de-)selected for all set data. Compile frequently used actions individually and apply them to your sets.

4 Task Calendar



You can access the task calendar by clicking on the icon in the navigation bar at the top. Here you can create new tasks, reschedule, change tasks, or mark them as completed. This gives a great overview of the tasks to be done in your company.

The program automatically adds the tasks "Nursery", "Seeding" and "Planting" to each planned set, depending on the crop type chosen. In addition, all tasks taken over from the crop by task templates and additionally planned for the set or field are transferred to the task calendar when the set is created.

Accessed on the field or in the transplants-greenhouse on a smartphone, each employee always has their tasks with all the information, can look up crop details and notes, set the time spent on a task and mark it as completed.

Selecting the planned year: To display the year for the task calendar view, use the year switcher from the navigation bar at the top (just like in the crop calendar).

4.1 Views (month, weeks, days)

The task calendar contains three views, a monthly view and the more detailed weekly or daily view. In the week view, a calendar export can be created for printing.



Default view task calendar: In your profile under Settings/Profile in the navigation bar, you can set your preferred default calendar start view.



see point 2.2, Settings/Profile

4.1.1 Month view



The month view shows the month displayed in the month switcher in the upper left corner. The table shows the calendar weeks and days in each green header field. Switch the months by clicking on the arrows.

If you started from week or day view, switch to month view by clicking "show entire month".

Monday	Tuesday	Wednesday	Thursday	Friday
CW 48 28 Bed preparation (Niko Laus) Hoeing (Rainer Rose) Orders (Rainer Rose) Team meeting (Rainer Rose)	29 Anzucht Call Carl (Rainer Rose) Clean up storage (Frieda) Compost spreading (Niko Laus) [...2 More...]	30 Clean up Tunnel 2 (Mitarbert) Seeds stocktaking (Lisbeth) Wash and cut (Rainer Rose) Wednesday Market (Mitarbert)	01 Anzucht Clean and cut (Rainer Rose) Frequent harvest (Urs) Hoeing (Lisbeth) [...1 More...]	02 Delivery (Rainer Rose) Harvest (Urs) Packing Boxes (Urs) Prepare Market (Rainer Rose)
CW 49 05 Clear bed (Mitarbert) Create Crop Plan 2023 (Rainer Rose) Isolate Irrigation (Rainer Rose) Orders (Rainer Rose)	06 Clean and cut (Rainer Rose) Frequent harvest (Urs) Packing Palettes (Rainer Rose) Prepack (Mitarbert)	07 Collect pipes and nets Earthing up (Mitarbert) Wednesday Market (Mitarbert)	08 Clean and cut (Rainer Rose) Cover Fleece (Mitarbert) Hoeing (Lisbeth)	09 Anzucht Harvest (Urs)

Tasks in the month view have a colored border around them. Tasks assigned to a person have the name in brackets behind the task name. The task examples shown, Anzucht (= Nursery) and Pflanzung (=Planting on the bed) are not translated, yet. They are added to the task calendar automatically for each set created and aren't removable. You can change these tasks in the set details sidebar.

 **Call Carl (Rainer Rose)** Tasks marked as **completed** are displayed paler and marked with a green tick on the left.

A day field can only display a certain number of tasks in the month view. To see the rest of the tasks, click on "...more..." under the tasks, which opens the more detailed day view.

4.1.2 Weekly view

 Access **week view** by clicking on the calendar week (in the month view on the far left of each week line or from the day view on the top left). Each day for the selected calendar week is displayed here with the planned tasks.


 Switch weeks with the week selector forward and backward. With "show entire month" you get to the month view. Click on the plus symbol to create a new task and on the "funnel" symbol to open the task filter.

Calendar export: Click on "Export of week.xls" to create an Excel file of the calendar week view. This can then be printed from Excel.

Monday	Tuesday	Wednesday	Thursday	Friday
CW 48 28 Bed preparation Niko Laus Field 04 Tunnel2 Hoeing Rainer Rose Porree 4 Shafton F1 0 0 m 0 * 200 = 15 * 20 cm (4 rows) Orders Rainer Rose Orders Team meeting Rainer Rose Team meeting	29 Anzucht Baby-Leaf-Salat 6 27 1 m = 1 (0,5) * 54 (6 Seed) = 15 * 20 cm (4 rows) Call Carl Rainer Rose Call Carl Clean up storage Frieda Clean up storage Compost spreading Niko Laus Field 04 Tunnel2 Harvest	30 Clean up Tunnel 2 Mitarbert Field T2 Plot1 Seeds stocktaking Lisbeth Seeds stocktaking Wash and cut Rainer Rose Fieldsalat 4 Vit 8483 110 m = 111 (110,17) * 77 (7 Seed) = 10 * 10 cm (7 rows) Wednesday Market Mitarberta Wednesday Market	01 Anzucht Mangold 4 59 6 m = 2 (1,09) * 54 (2 Seed) = 35 * 30 cm (3 rows) Clean and cut Rainer Rose Porree 3 Shafton F1 7884 296 m 40 (39,42) * 200 = 15 * 20 cm (4 rows) Frequent harvest Urs Porree 3 Shafton F1 7884 296 m	02 Delivery Rainer Rose Delivery Harvest Urs Spinat 8 Butterfly 3535 133 m 21 (20,09) * 176 = 15 * 15 cm (4 rows) Packing Boxes Urs Packing Boxes Prepare Market Rainer Rose Prepare Market

Tasks that are not assigned to a set (e.g., "Team meeting" or "Call Carl") show the name of the task and, if applicable, the responsible employee. If crop information is also displayed, the task is associated with the set indicated in green font.

By clicking on the set or field/plot name in a task, you can call up the sidebar with the set details or switch directly to the field/plot view.

4.1.3 Day view

29 Call up the **day view**, by clicking on the desired day number field in the week line of the month or week view.

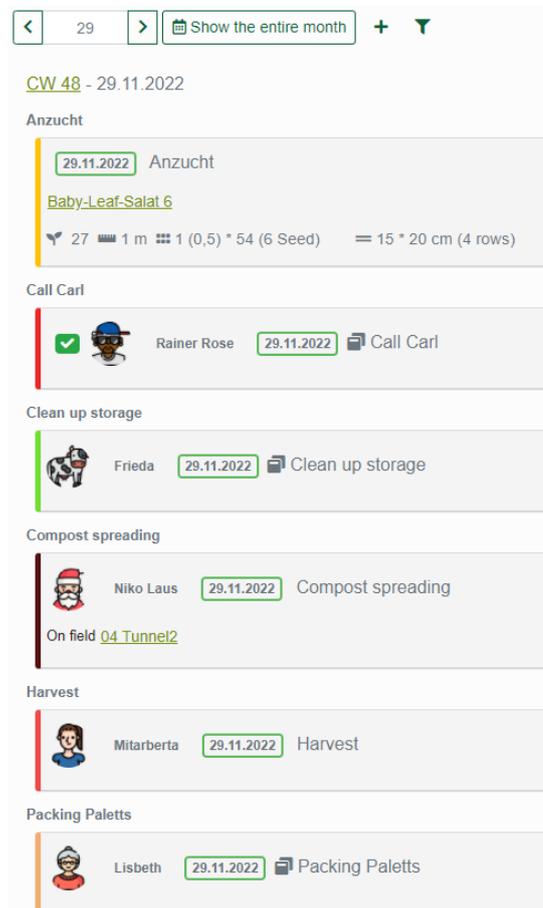
With the selection field in the upper left corner, you can switch the days forward or backward. All tasks of the selected day are displayed with details and notes.

To get back to the week view, click on the week number in the upper left corner. For month view, click on "show entire month" in the button bar at the top.

In the daily view you can create new tasks by clicking on the "plus" or filter existing tasks on the funnel icon at the top.

To modify a task or mark it as done, click on an empty space in the task bar to open the edit window. Confirm the changes by clicking the green tick on the right bottom.

 Delete a task with the "trash can" icon on the right side of the task line.



4.2 Tasks

 **Create a task:** By clicking on the "plus" symbol (in all calendar views at the top) and selecting "new task" or a stored general task from the menu, you open the creation window for a new task.

Assign the date, a color, and the responsible co-worker, if necessary. You can enter a predefined time for the task or omit the working time field.

Click in the notes field to create a note on the task.

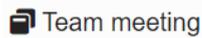
With the selection fields "Set", "Field" and "Field" you can assign a set or a field with individual fields to the task. To save the task with all its details in the task calendar, click on the checkmark (bottom right). Click on the X next to it to cancel the editing. You can delete the task with the "trash can" symbol above it.



Complete task: Once a person has completed their task, it can be marked as done directly from the mobile app or desktop. Open the task, enter the working time, and click on the "done" button (bottom right). Tasks marked as "done" are indicated by a check mark at the task in the overview.



You can revoke the completed status by clicking on "Reset status" (in the editing window of a task marked as completed).



Create Reoccurring task: To schedule a task multiple times with a consistent interval, activate the "Reoccurring Task" checkbox in the task edit window and set a daily or weekly interval and end date. You can choose between a relative date or an absolute date by clicking on the button.

A scheduled reoccurring task can be identified by the symbol to the left of the task name.

4.3 Filter Task Calendar

Click the funnel icon to open the filter sidebar.

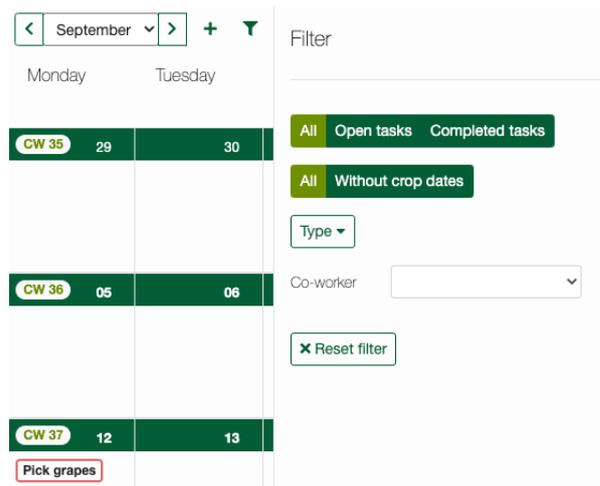
Use Open/Completed tasks buttons, to only show open tasks or all tasks already set to "done".

Click on the "without crop dates" button to hide the tasks (Nursery, Seeding, Planting) automatically generated by the program when creating the set; click on "all" to show again.

To display one or more task types, click on "Type" and select tasks from the menu by checking the respective box.

By selecting a name in the "Co-worker" menu, you can view the tasks assigned to her.

Use "Reset filter" button, to deactivate all filter-options and show all tasks again.



A click on the X in the upper right corner, closes the filter window.

The filter icon appears in light green, while filter options are activated. To restore default view, click on "Reset filter" in the filter window.

5 Data



The data menu provides access to **harvest recording** and **delivery, storage** for harvest and goods, the **customer** administration, the **seed storage**, as well as the farm **documentation and statistics**.

5.1 Harvest recording and delivery

Harvest recording In the menu item "Harvest recording", all sets of the current week which are in their harvest period, are displayed. Further sets with a harvest period close in time can be added. Here you can enter the quantities for each harvest carried out for a set. In this way, they are recorded as stock and can then be allocated in a delivery to customers or to the members of a CSA.

Delivery All created deliveries can be found under "Delivery". Add customers for each delivery, allocate them the proportional or the total available quantity of all recorded harvests and export the finished planned delivery.

5.1.1 Harvest recording



Enter the quantities harvested in the currently selected calendar week for each set. If necessary, enter a planned harvest quantity, in case it differs from the automatically displayed planned quantity of the set. When deleting the quantity by backspace-key, the automatic quantity is generated again.

Sets +	Planned harvest amount			Harvest amount this week			Harvest period		
	This week	Total	Unharvested	Harvested	Ordered	Rest	Start of harvest	End of harvest	Duration of harvest
Asia_Salat_4 Asia-Salat-Mischung	<input type="text" value="21"/> kg	210,01 kg	150,01 kg	60 kg	62,26 kg	-2,26 kg	CW 34 23.08.2021	CW 01 09.01.2022	20 Weeks
Asia_Salat_5 Asia-Salat-Mischung	<input type="text" value="17"/> kg	170,01 kg	122,01 kg	46 kg	53,02 kg	-5,02 kg	CW 35 30.08.2021	CW 02 16.01.2022	20 Weeks
Porree_1 Blaugrüner Winter/Avano	<input type="text" value="301"/> Piece	3001 Piece	1761 Piece	1240 Piece	834 Piece	406 Piece	CW 43 25.10.2021	CW 17 01.05.2022	27 Weeks

The table shows all sets currently in the harvest period with their harvest dates. You can hide a set, by clicking on the "eye"-Button, on the left of its name.

Planned harvest amount: The first column of Planned harvest amount contains the harvest quantity planned for **this week**. In the column **Total**, the harvest quantity to be expected in the entire harvest period is shown. **Unharvested**, shows the quantity of the set still on the bed.

Harvest amount this week: In case of existing planned deliveries (see point 5.1.2) in the selected week, the entered order quantities "**Ordered**" are compared with the already entered harvest quantity "**Harvested**". Depending on the deficit or surplus of the harvest to the order quantity, a negative or positive available remaining stock "**Rest**" is output.

Harvest period column: The **harvest start**, **harvest end** and **harvest duration** (planned harvest period) of each set are displayed here.

Add Sets: Sets with two weeks of scheduled harvest time before and after the current week can be added to the harvest set.

Open the "Add sets" sidebar by clicking on the plus symbol in the upper left corner. Select the sets by activating the checkbox and click on the "Add selection" button. To close the sidebar, click on the green X at the top right or just in the harvest recording table.

Add planting sets

+ Add selection

Planting set	Start of harvest	End of harvest	Duration of harvest
<input checked="" type="checkbox"/> Feldsalat 8 Elan	CW 01 03.01.2022	CW 05 06.02.2022	5 Weeks
<input checked="" type="checkbox"/> Feldsalat 7 Verte de Cambrai	CW 01 04.01.2022	CW 05 31.01.2022	4 Weeks
<input checked="" type="checkbox"/> Pastinake 1 Aromata	CW 27 08.07.2021	CW 51 22.12.2021	24 Weeks
<input type="checkbox"/> Pastinake 2 Aromata	CW 40 07.10.2021	CW 12 23.03.2022	24 Weeks

Hide sets: On the far left of each set-column is a hide button. Sets that have already been completely harvested and distributed or should not be included can be hidden. The sets are then located in the "Add planting sets" sidebar (plus button top left) and can be added again to the table.

Sets +	Planned harvest amount		Harvest amount this week				Harvest period			Harvest recording Rucola 4 Wilde Rauke
	This week	Total	Unharvested	Harvested	Ordered	Rest	Start of harvest	End of harvest	Duration of harvest	
Asia Salat 4 Asia-Salat-Mischung	<input type="text" value="20"/> kg	210.01 kg	150.01 kg	60 kg	62.26 kg	-2.26 kg	CW 34 23.06.2021	CW 01 09.01.2022	20 Weeks	Harvest Date: 01.01.2022 Harvest amount: 6 kg
Asia Salat 5 Asia-Salat-Mischung	<input type="text" value="60"/> kg	170.01 kg	122.01 kg	48 kg	53.02 kg	-6.02 kg	CW 35 30.06.2021	CW 02 16.01.2022	20 Weeks	Harvest date: 01.01.2022 (CW 52) 12 kg 01.01.2022 (CW 52) 9 kg Harvest amount Total: 21 kg
Porree 1 Blaugrün Winter/Avano	<input type="text" value="301"/> Piece	3001 Piece	1761 Piece	1240 Piece	834 Piece	406 Piece	CW 43 25.10.2021	CW 17 01.05.2022	27 Weeks	
Rucola 4 Wilde Rauke	<input type="text" value="10"/> kg	30.01 kg	9.01 kg	21 kg	42.6 kg	-21.6 kg	CW 50 13.12.2021	CW 05 06.02.2022	8 Weeks	

Enter harvest amount: Select the desired harvest week using the calendar week switcher. In the row of the set to be entered, under the **Harvested** column, click on "Enter harvest records" or an already existing value. The harvest record sidebar of the chosen set appears on the right.

Here, each harvesting result can be entered, with date and harvest quantity and thus documented in the harvest list. If several harvests are listed, the total harvest amount of the set is displayed beneath all harvest record entries in the last table row.

Record harvest entry: If necessary, change the harvest date and/or the unit of measure. Now enter the harvest quantity. Click the green tick to confirm the record of the harvest entry.

Mobile harvest recording: Harvest entry can also be done directly after harvesting in the field with the mobile version on the smartphone.

In the example, the 4th set of rocket salad ("Rucola 4 Wilde Rauke", 8 weeks duration of harvest) has already been harvested 2 times in week 52. The harvests were each recorded in the program, a total of 21kg of 30.01 kg total planned harvest quantity, have already been harvested. With 9.01kg still unharvested, the set will be harvested for the last time today. It yields a round 6kg, which is entered in the harvest quantity field of the entry sidebar. After confirming, 3.01kg remains on the field (Unharvested). The remainder (Rest) is displayed negatively, because 42.6kg of the set have been preplanned in deliveries (Column Ordered), but the set only had a real total harvest of 27kg. If the harvest would have been bigger than the ordered 42.6kg, the negative remainder would be displayed positive, and the Unharvested column would remain empty for rocket salad 4, as there is no harvest left on the field.

On the leek set (Porree 1) above, with order quantity of 834 piece, 1240 were harvested in the current week. A remainder of 406 piece of leeks, that has not yet been planned in deliveries, is displayed positively.

Weight conversion: In the settings under Profile, a weight conversion of piece and bunch crops can optionally be activated. This adds the line "**kg per piece**" with an input field, to the harvest recording sidebar. Each harvest quantity entry will then include the estimated or weighted average crop weight value of a piece or bunch of the crop. The value should be used to determine the total and average delivered weight.

5.1.2 Delivery



The delivery area consists of the overview table (deliveries list), which contains all deliveries already planned with date, and other data of the individual delivery in every line.

Delivery date	Name	Members/customers	Delivery places for the delivery
<input type="checkbox"/> CW 52 Sat., 01.01.2021	Tour1	CSA, 1 Mr. customer1, 3 Mrs. customer3	Farmers Shop, Hotel California, Smalltown, Bigtown
<input type="checkbox"/> CW 52 Sat., 01.01.2021	Tour2	1 Mr. customer1, 3 Mrs. customer3	Smalltown, Bigtown

Create new individual deliveries in the deliveries list and call up existing entries to edit them. To delete an entry, click on the trash can icon on the left above the table, after activating the checkbox far left in the line of the delivery.

5.1.2.1 Create new delivery

 In the deliveries list, create a new individual delivery for the current week, by clicking on the plus sign (top left). In the popup window, first the delivery date can be adjusted for planning in another week. Enter a name for the delivery then and select the customers to be delivered to.

If sets in harvest, sets with stock inventory or/and purchased articles from the storage are not required in the delivery, uncheck the box. This way they will not be listed in the new delivery table. Click on "create" to create the new delivery or on "cancel" to the right of it.

Plan a new delivery

Delivery date: 01.01.2022 

Name: Tour3

Members/customers: CSA × 1 Mr. customer1 × 

Distribution locations: Distribution locations 

add planting sets in harvest

add planting sets with inventory

add article with inventory

 Create 

 **Fix delivery:** By clicking on the "open lock" icon to the right of the delivery entry, the delivery is fixed and can no longer be edited. By clicking on the closed lock symbol, the delivery can be unlocked again for processing.

 To edit an existing delivery, click on the list entry. You can return to the overview of deliveries by clicking on the "Back arrow" at the top left.

5.1.2.2 Edit individual delivery



To edit an existing delivery, click on the list entry. You can return to the overview of deliveries by clicking on the "Back arrow" in the top left-hand corner.

Name and date of the delivery are displayed above the table and can be changed there.



The **Fix button** locks the delivery from changes. It can be unlocked again in the deliveries overview, by clicking closed lock-Button, far right of each table row.

Add/remove customers: Click on the customer selection menu above the table and select one or more customers by using their checkbox. The customer columns of all customers selected, will appear in the list. To remove a customer from the list, uncheck the box. All order quantities for the customer will be lost!

Members/customers ^

Select all

Q Search

- CSA
- 1 Mr. customer1
- 3 Mrs. customer3
- 4 Mr. customer4
- 5 Mrs. customer5
- 6 Mr. customer6

see also point 5.2, Customers

Delivery performance: To keep the delivery up to date, continuous communication with the database is necessary. Due to CSA and many customers, longer loading times can therefore occur in a delivery. We recommend, to make consumers and goods/article selection only as large as necessary. If possible, split large deliveries into two or more deliveries, if you have low performance.

Collapse/expand customers: For more clarity of the delivery table, customer columns can be collapsed. Click on the small arrow in front of the customer's name to close and on the arrow at the top of the customer to expand again. In the example illustration, the CSA column and the quantity column are also collapsed. The latter then only shows the remaining quantity column (Rest), so that a comparison with the remaining quantity still available is possible when entering the order quantities of customers.

+ Add records/articles		Amount	CSA	▶ 1 Mr. customer1		▶ 3 Mrs. customer3		▶ 4 Mr. customer4		▶ 5 Mrs. customer5	▶ 6 Mr. customer6	▶ 7 Mrs. customer7	▶ 8 Mr. customer8		▶ 9 Mrs. customer9	
Culture/Ware	Set/Article	Rest		Target	Is	Target	Is	Target	Is				Target	Is	Target	Is
Asia Salat	Asia-Salat-Mischung 4	22,58 kg		12	12	7	7	3	3				3	3	4	4
Asia Salat	Asia-Salat-Mischung 5	-6,86 kg		10	10	8	8	3	3				5	5	2	2
Asia Salat	Asia-Salat-Mischung 6	160,94 kg		3	3	4	4	5	5				6	6	4	4
Asia Salat	Asia-Salat-Mischung 7	56,68 kg		7	7	5	5	2	2				2	2	1	1
Baby-Leaf-Salat	Laibacher Eis 4.13	-87,57 kg		5	5	6	6	2	2				4	4	7	7
bred	Rye Bred	2 Piece		2	2	3	3	4	4				2	2	2	2
Feldsalat	Verte de Cambrai 7	68,68 kg		15	15	12	12	10	10				5	5	32	32
jam	Strawberry Jam	36 Piece														

Create commodity groups: Use drag and drop to group wares and crops with the same name. By clicking on the three grey dots (far left of entry-row) and holding down the mouse button, you can grab a list entry and drag it onto another entry. Be sure to drop in the crop/ware column. This way both sets/articles will be grouped under the crop/ware name. To remove an entry from the group, drag it all the way to the left to the narrow first table column. The entry will be then displayed separately. Quantities of commodity groups in CSA and customer columns are summed up, in the parent crop/ware group field.



Click on **Add Sets/Articles** to open the sidebar. Here your crop sets or **purchased goods** are displayed. Click on the corresponding tab (Sets or Purchase).

Add Sets: The Add planting sets tab is the default tab, when opening the sidebar. This list displays all sets, with up to 2 weeks before and after harvest time, in relation to the current delivery week. If sets, you have hidden from the delivery, are in the 2 weeks before/after period, they will be displayed here. Use the search field and activate the filter to quickly find crop names or crops marked with #tags in the table.

Add planting sets x

Sets Purchase

Search

Crop	Set	Available	Harvest from	To
Bohne	Blauhilde 3	67 Piece	09.12.	02.02.
Feldsalat	Elan 8	0 kg	03.01.	06.02.
Grünkohl	Halbhoher Grüner ...	-103 kg	22.11.	26.12.
Möhre	Rodelika 6	-309 kg	25.10.	27.03.
Pastinake	Aromata 2	-927 Piece	07.10.	23.03.
Porree	Blaugrüner Winter/...	105 Piece	25.10.	01.05.
Postelein	Winterpostelein 1	-41.22 kg	01.11.	23.01.

Add articles: Here you will find all additionally purchased articles from the storage master data, that are currently not displayed in the delivery. There is also a search field and filter here. You can filter by category, goods, supplier, origin and #tags.

Add articles x

Sets Purchase

Search

Ware	Article	Available	Supplier
Bakery products			
bred	Rye Bred	132 Piece	House of Br...
Own processed			
jam	Strawberry Jam	140 Piece	Own proces...

Add Set/Article by drag n drop: Drag an entry by clicking on the three dots at the far left of the set/article row, and holding the mouse button.

Drop it on an entry in the crop/ware column of the delivery table. The new entry is subordinated to the crop if it has the same crop name, if not, it is included in the delivery as a separate entry. Drop on subordinated entries, to add.

+ Add records/articles		Amount				
Culture/Ware	Set/Article	Unit	Planned	Available	Ordered	Rest
Asia Salat		kg		398,65	35,11	363,54
	Asia-Salat-Mischung 4	kg	21	74,43	10,85	63,58
	Asia-Salat-Mischung 5	kg	17	51,92	8,78	43,14
	Asia-Salat-Mischung 6	kg	10	188,1	5,16	182,94
	Asia-Salat-Mischung 7	kg	20	84,2	10,32	73,88
Baby-Leaf-Salat	Laibacher Eis 4 13	kg	20,01	-53,25	10,32	-63,57
Feldsalat	Verte de Cambrai 7	kg	20,01	154	10,32	143,68

Crop/Wares, Set/Article and Amount columns: Crop/Wares contains the name of the crop or ware. The set/article lists the set(s) of a crop or one or more articles for a commodity. The "hide" button (crossed eye), to the left of the set/article name, hides the entry from being displayed in the list. Collapse Amount column by clicking the small arrow to the left of the name. The latter then only shows the remaining quantity (Rest) column. Click on the arrow again, to expand.

The **Amount column** contains the following subcolumns with the values described:

- **Unit:** maintained in set-creation (may be different for harvest entry), or in the article.
- **Planned:** planned delivery quantity – value edited at the set, or manually filled
- **Available:** current crop stock minus quantities planned in other deliveries
- **Ordered:** sum of set/article quantities planned, from all deliveries
- **Remainder:** available remaining quantity, that can still be distributed to customers (Available minus Ordered)

Enter customer order quantities: Manually enter the customer’s order quantities (target/is).

Target and Is: It is sufficient to fill in the planned target values of an order in the “Target” column, these will be automatically transferred to the “Is” field. Click in the “Is” field to change the “Is” quantity if it deviates from target (e.g. cause a customer has reordered at short notice).



Fast input: Without a lot of scrolling, you can quickly enter the order quantities by clicking in the first field and then using the Tab key to jump through the table fields one after the other. Just type in ordered quantity inside the field “Target”, corresponding “Is” field will get the same number. Only if “Target” and “Is” differs, fill in the Is-Quantity separately. Collapse customers who should not get any quantities to skip them with Tab key.

Special feature customer "CSA" (farmtype CSA only): If selected "CSA" in customer menu, required quantities, based on the number of member shares stored in the current period, are automatically filled in for the current delivery. Instead of target and actual quantity (Is), for CSA the columns "Distribution", to display available quantity for distribution and "Total" for total quantity of delivery, are planned at all pickup locations. The quantity in the distribution field is automatically determined from the “required harvest quantity per share” for sets and from the stored “quantity per share” in the article master data for purchased articles.

If CSA is selected, a pickup-station menu appears next to the customer menu. Here you can select the stations to be delivered. The menu selection/deselection works the same way.

Pick-up locations and share types in the delivery: If the CSA columns are not all expanded, the selection/deselection of pick-up locations can only be recognized by change in delivery quantities. Expand them before edit quantities for pickup locations as follows:



Click on the arrow icon at the top right of the CSA column. Another column "**All pickup locations - quantity per share type**" appears. Close by clicking on the arrows again.



Now click on the arrow symbol in the column All pick-up locations. This will display all created pickup locations in a separate column with the total quantities to be delivered.



Click on the arrow symbol in the column of a pickup station to expand the quantity per share type for the specific station.

+ Add records/articles		Amount					CSA		All pick-up location(s), Quantity p.			Farmers Shop, Quantity per share			Hotel California, Quantity per share					
Culture/Ware	Set/Article	Unit	Planned	Available	Ordered	Rist	Distribution	Total	0 M	103 S	0 L	total am.	0 M	101 S	0 L	total am.	0 M	2 S	0 L	
Asia Salat		kg		398,65	35,11		383,54	35,11	35,11											
	Asia Salat-Mischung 4	kg	21	74,43	10,85		63,58	10,85	10,85	0,21	0,11	0,42	10,61	0,21	0,11	0,42	0,24	0,21	0,11	0,42
	Asia Salat-Mischung 5	kg	17	51,92	8,78		43,14	8,78	8,78	0,17	0,09	0,34	8,59	0,17	0,09	0,34	0,19	0,17	0,09	0,34
	Asia Salat-Mischung 6	kg	10	188,1	5,16		182,94	5,16	5,16	0,1	0,05	0,2	5,05	0,1	0,05	0,2	0,11	0,1	0,05	0,2
	Asia Salat-Mischung 7	kg	20	84,2	10,32		73,88	10,32	10,32	0,2	0,1	0,4	10,1	0,2	0,1	0,4	0,22	0,2	0,1	0,4
	Baby-Leaf-Salat	kg	20,01	-53,25	10,32		-63,67	10,32	10,32	0,2	0,1	0,4	10,1	0,2	0,1	0,4	0,22	0,2	0,1	0,4
	Feldsalat	kg	20,01	154	10,32		143,68	10,32	10,32	0,2	0,1	0,4	10,1	0,2	0,1	0,4	0,22	0,2	0,1	0,4
	Feldsalat	kg	15	-15,45	7,75		-23,2	7,75	7,75	0,15	0,08	0,3	7,58	0,15	0,08	0,3	0,17	0,15	0,08	0,3
	Feldsalat	kg	25,01	-53,56	13,42		-66,98	13,42	13,42	0,26	0,13	0,52	13,13	0,26	0,13	0,52	0,28	0,26	0,13	0,52
	Pastinake	Piece	300,02	-927	207		-1194	207	207	3	2	6	202	3	2	6	5	3	2	6

Change quantities for pickup location: By entering manual values in the "All pickup locations" column, the delivery quantities can be adjusted equally for all pickup locations.

To change the quantities for one specific pickup location, open the share type columns for that pickup station. Enter the quantities to be changed manually. The total delivery quantities for the station and in the CSA "Total" column are then automatically adjusted.

67 Manual quantity entries are displayed with a blue border.

Click the calculator, to perform the automatic calculation for the CSA quantities of a set or article. If manual quantities were entered at the share types, they will be overwritten again with the initial values from the Distribution column. This also resets the planned quantity to the initial value.

The **pickup station buffer** is a security calculation on every delivery quantity. Edit it in the pickup station column above the name. If a default-buffer is maintained at the pickup station, it can be changed for the individual delivery. The buffer in % is added to all delivery quantities of the pickup station as a reserve. It can only be edited for the current delivery. Change default value in the pickup station details.

 see point 5.3.2. pick-up stations

5.2 Storage



You can access the storage by clicking on "Storage" in the data menu. Manage your harvest and ware stocks here and get a good overview of the incoming and outgoing goods.

In the storage, purchased and own processed articles, are created and managed. It's important to distinguish between these created "articles" and the sets from the crop planning, which have a current crop stock. The sets are only displayed in the stock list of the storage and have no master data. That's why they never are in the Article list and contain no article number.

The storage consists of two main views, **Inventory list** (default view) and **Article list** (master data). The inventory list shows all purchased items and all sets with inventory quantity and all items that are scheduled in a delivery. The article list contains all the article master data for your assortment of goods (purchased goods and own processed products). Click the buttons to open the respective list.

When an article stock is entered in the storage, the article is displayed in the inventory list. Sets appear in the inventory list when a harvest is entered. From the stock list entries of recorded quantities of items and sets, deliveries can be created to all maintained customers or CSA members and pickup locations.

 see point 5.1.2 Delivery

5.2.1 Article number - category, product, and article

The number of an article is required for the clear identification of its goods movements and delivery quantities in the program. For the storage, an automatic assignment of article numbers is integrated. Alternatively, you can assign an article number freely, e.g., if there is already an existing number logic in your warehousing, or if you prefer a different logic.

Auto article number: The automatic article number is created by selecting or entering the category, ware and article and the number of article variants, (e.g., 05.01.001.01).

The first two digits are generated from the **categories**. 01 to 06 are already preset as follows: Vegetables = 01, Fruit = 02, Dairy products = 03, Meat = 04, Baked goods = 05, Dry goods = 06. Further category numbers are generated continuously, when new categories are entered.

The next two digits stand for a **commodity** (ware), e.g., bread. The number would then be 05.**01** for category 05 (bakery products) and first entered product 01 under category 05.

The three digits after the commodity code stand for the **article**, e.g., the bread type "rye bread". The number is then 05.01.**001**, for the first article created under the commodity "bread".

The last two digits stand for the same articles with different characteristics, e.g., carrots of the same variety with different units (bundle and kg). Or rye bread from different bakers or suppliers or with different country of origin.

Article number freely assigned:

If the checkbox is enabled, an article number can be entered as desired in the master data of each

Art-No.	<input type="text" value="0123-9345824789-789"/>
Art-No. freely assigned	<input checked="" type="checkbox"/>

article (special characters and letters allowed). This deactivates the automatic numbering at category, ware and article. The free input overwrites an already automatically assigned number and remains, even if the "free assigned" checkbox was removed again. By deleting the freely assigned number the automatic can be reactivated. You will be asked whether the current (freely assigned) master data should really be overwritten. Confirm, and the article receives the automatically assigned number again.

If an automatically assigned new number already exists in the old assortment (before using the crop planner), it can be used further by "freely assigned". An example: If the crop planner has given the purchased "Sour cucumbers" the number 08.01.001.01, but this number has been used for 20 years in the farm shop for a delicious cake according to grandma's recipe, freely assign the number. Then "Delicious cake" can contain the same (but freely assigned) number as "Sour cucumbers".

5.2.2 Article list (master data):

The article list shows all articles, that are not grown as a set on the farm and are therefore not transferred to the stock inventory list via harvest recording. It can be purchased goods, e.g., bread, which is sold through a sales channel or distributed to the members of the CSA. It can also be the own jam or juice from own fruits.

Art.No.	Cat.	Culture/Ware	Article	Unit	Available	Brand	Supplier	Origin	PU
05.01.001.01	Bakery products	bread	Rye Bread	Piece	132		House of Bread	UK	1
0123-9345624789-789	Own processed	sour cucumbers	Sour cucumbers	Piece			Own processed		1
07.01.001.01	Own processed	jam	Strawberry Jam	Piece	140		Own processed		6

The master data is created in the storage, so that an entry can be made in the inventory list when the wares are delivered from a supplier.

+ create new article **Enter article master data:** Click on "create new article" to create a new article entry. In the opened article master data sidebar, the data of the article can now be entered. The sidebar has three tabs "Article", "Notes and #Tags" and "Inventory Change".



In the article tab you enter all master data of the article, which should be displayed in the stock and delivery tables later. If you want to use the automatic assignment of article numbers, select category, ware and article, or enter your own descriptions for them and click "create".

For example, you want to sell Christmas trees that a neighbor has grown for you. They are not available in your crop plan and can't therefore be displayed as set in stock/delivery.

Enter the category "woody plants" that does not yet exist and click on "create". The selection is now saved under the next possible category number and can be selected as a category in the selection menu. You proceed in the same way in the ware field. Enter e.g. "fir" there, and click "Create", thereby the article number is assigned. In the article field you enter "Nordmann fir" and click "Create". The new article is now listed in your article list.

Now fill in all other master data fields: The available stock of the article cannot be edited in the master data sidebar, but a quantity available, will be displayed. Select the appropriate **unit** for your ware, e.g., for bread grams, kilograms, or pieces (for the fir). Enter a **PU** (packaging unit), (e.g., bread with unit pieces is delivered in a box with 10 pieces of bread; then VPE = 10). Enter **brand**, **supplier**, and **origin** (the fields work the same, as described above for category, product, article).

Shown for CSA only: Enter a **planned amount per share** and, in the case of pieces/bulk wares, a weight specification.

The master data is now completely entered for the article and will be saved, by closing the sidebar.

In the **Notes&#Tags** tab, store your #tags for sorting and annotations in the notes field, as in the other areas of the program. In the article sidebar, however, there are two additional, scalable note fields, e.g. for product information about the article.

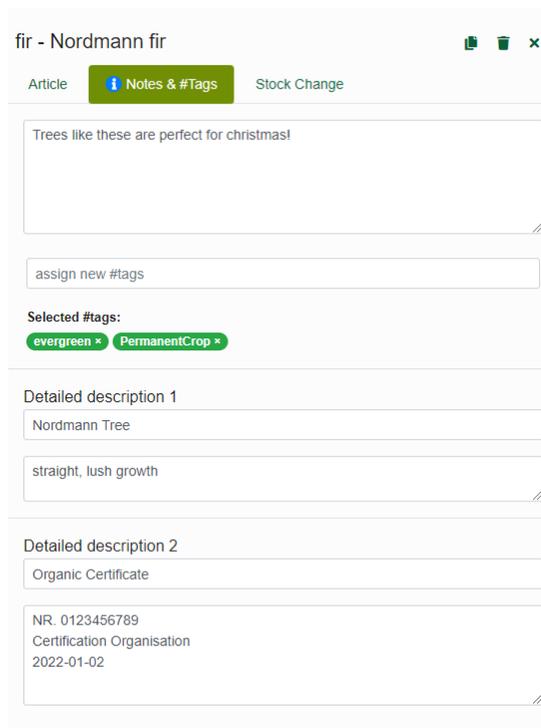
The article tab **Stock Change** is similar with the one on the set. Here, the remaining stock of an article, that has been disposed of, can be deleted too, and is then displayed in the Reject column of the stock change table. All inputs and outputs, and rejects are displayed in the table sorted by calendar weeks and date.

 see point 3.4.4.4 Change in stock on set

 enter Inventory

Enter article inventory:

Click on the button to enter a new item stock.



 **Copy articles:** For a quick creation of similar articles, copy them. Click the box on the far left of the entry in the article list, then click copy button above the list or in the article sidebar (upper right corner). The article will be copied with all its master data and added to the list as a new entry, with the next possible last digit of the article number.

 **Delete article:** Click on the trash can icon to delete one or more selected items. Confirm if you are sure - all data will be lost!

 **Search and filter:** With the search you can narrow down the list to your search term. Enter your request in the search box at the top right of the list. Filter by item number, category, crop/wares, brand, supplier, origin and #tags. Click on "Reset Filter" to display the entire list again. Click on "Close filter" to close the sidebar.

5.2.3 Inventory

Articles in the inventory list: The list is structured in the same way as the master data list and shows all items with currently available stock. In addition, all items that are scheduled in a delivery and therefore have a negative A-stock (=available stock displayed in column "Available") can be found here. Articles are only displayed here, after stock has been entered for the first time. For articles/sets that are not scheduled in deliveries, the entries are automatically removed from the stock list when the stock has fallen to zero. In the stock list, articles/sets can only be edited, copied, and deleted via the article or set sidebar, but not directly in the table.

To open the set or article sidebar, click the link in the item column. To go directly to the inventory, change tab of a set or article, click on the number in "Available" column.

Art.No.	Cat.	CulturoWare	Article	Unit	Available	Brand	Supplier	Origin	PU
05.01.001.01	Bakery products	bread	Brye Bred	Piece	132		House of Bread	UK	1
07.01.001.01	Own processed	jam	Strawberry Jam	Piece	140		Own processed		6
	Vegetables	Asia Salat	Asia Salat 6 Asia-Salat-Mischung (2021)	kg	182.94		eigene Ernte		
	Vegetables	Asia Salat	Asia Salat 4 Asia-Salat-Mischung (2021)	kg	63.58		eigene Ernte		
	Vegetables	Feldsalat	Feldsalat 7 Verte.de Cambrai (2021)	kg	143.68		eigene Ernte		



Enter inventory of article: Click the button to open article search.

Then select a category or product from the fields. If there is only one article as a search result, the program jumps directly to the article sidebar. If there are several articles, they will be offered in the selection menu and in a table below. Click on the article whose stock is to be recorded. The article sidebar opens.

enter Inventory - search article
[+ create new article](#) x

Art-No.

Art-No.

v

Category

Category

v

Ware

Ware

v

#tags

#tags

v

and

x

Article

Article

v

x Reset filter

Create new article: If an article is not available in the search, click the button in the upper right corner to create the new article.

Article sidebar: If an article is available in the article list (master data), the article sidebar is opened. The structure is similar with the article master data sidebar, with the difference, that master data cannot be changed, but stock can be entered here.

Enter stock: Select the date, if the wares receipt was not on the same day of entry. Enter the quantity in the field "enter inventory" and confirm the entry by clicking on the green tick.

Delete stock: If part or all stock is to be deleted, e.g., because a part of it has spoiled, enter the quantity in the "delete inventory" field and confirm by clicking on the green tick. The deleted quantity is documented in the reject in the tab stock changes.

Do you want to delete the stock because a wrong delivery was detected after the entry? Then switch to the "Stock Change" tab and delete the quantity received in the lower table. If quantities of the item are/were already planned in a delivery, the item must first be deleted from the delivery, to delete the quantity received.

jam - Strawberry Jam
x

Art-No.

07.01.001.01

Category

Own processed

v

Ware

jam

v

Article

Strawberry Jam

v

Crop stand

140

Date

02.01.2022

📅

enter Inventory

0

v

delete Inventory

140

v

Unit

Piece

v

PU

6

Brand

v

Supplier

Own processed

v

Origin

v

Planned amount per share

1

Sets in the storage: In addition to the purchased articles, all sets with recorded harvest and positive stock are displayed in the inventory list. The master data comes from the set in the crop plan and therefore does not have to be stored in the master data area of the storage. Therefore, sets only appear in the inventory list and never in the article list.



Search and filter: Type in a search term, to narrow down the list to it. Open the Filter by clicking on the "funnel" icon, to filter by item number, category, crop/wares, brand, supplier, origin and #tags. Click on "Reset Filter" to display the entire list again. Click on "Close filter" to close the sidebar.

5.3 Customer management



Members/customers

The customer area opens by clicking on "Data" and selecting "Members/customers" in the navigation bar. It contains three sub-areas - the **Members/customer administration**, which is open by default, and the areas **distribution location** and **share types/subscriptions**.

Number	Name	Last Name	Street	Zipcode	City/town	E-mail	Osa Distribution Location	#Tags
1	Mr.	customer1	Bakerstreet 532	77777	Smalltown	chr@hausen.de	Farmers Shop	Shop
3	Mrs.	customer3	Maryroad 70	23235	Bigtown	salda@sdp.pl	Farmers Shop	Restaurant Market
4	Mr.	customer4	Newtonstreet	55544	Smallvillage	my@littleshop.us	Hotel California	CSA

In each of the three areas a list is displayed where you can create and edit entries. To **search the list**, click on the search field at the top right and enter the search term. Editing list entries is done via a sidebar on the right side of the screen.



Creating a new list entry: Click on "Create" to create a new customer, distribution location or share type. The side menu for editing the new entry opens automatically. To enter data, open the respective menu item (address, distribution location, bank details, #tags and shares) by clicking on it.



Edit an existing list entry: Click on the appropriate line in the list and click on the "pencil" icon in the side menu. This makes the customer data editable.

Important: In the customer area, entries are not automatically saved!



To **save changes to an entry**, the Save button at the top right of the respective sidebar must be pressed.



Delete entry: Open the entry and click on the trash can in the top right sidebar. Confirm the confirmation prompt to delete the entry from the list.

5.3.1 Create and edit members/customers

Members/customers

In the category "Members/Customers" the customer file is displayed. All customers, who are to be included in deliveries, are stored here. In the case of solidarity farming, the members can also be entered here and optionally one or more shares and the #Tag CSA can be stored.

Each customer entry contains the customer's contact details, if applicable an assigned pick-up station or a delivery address that differs from the customer's address. In addition, if applicable, bank details, #tags for displaying a customer group affiliation and, in the case of the "CSA" farm type, the additional section membership "shares".



Create members/customers: Open the sidebar by clicking on "Create" or on a list entry. For the latter, click on the "pen" symbol in the menu to enter or change data.

Address data: Enter the customer's contact details.

CSA Distribution location/delivery address: To assign a pickup location, select it from the drop-down menu. To use a **delivery address of the customer**, check the box next to "Use delivery address".

Bank details: Enter the customer's bank details.

#Tags: Under "already used #tags" the following customer groups (CSA, restaurant, shop, market, cooperative member) are available. Click on one or more of the predefined #tags (highlighted in blue) to assign the customer to a customer group. To create a new #tag, enter the name in the input field and confirm with Enter. The new #tag is now assigned to the customer (green #tags) and will be added to the list of existing #tags (blue). Assigned (green) #tags can be removed by clicking on the small X to the right of the #tag name, in edit mode.

Shares (only for CSA): Here you can determine how many shares are allocated to the customer in which share type(s) or subscription.

Create a new share entry: Define a period by setting start and end calendar week (CW) and year. Specify the number of harvest shares, ordered for the customer during this period. Assign the appropriate share type to the customer. Click on "create" below, to accept the entry. Create another entry with a new period if the number of shares changes, or the period is extended.

Manage share entries: Existing entries are displayed under the share investment field, by clicking on the "plus" to the left of the respective share type or subscription.

You can delete an entry by clicking on the trash can icon.

The screenshot shows a web form for creating or editing a customer. It is divided into several sections with green headers:

- Address:** Contains input fields for Number (10), Name (Sam), Last name (Hawkins), Company / company name (Saloon), Street (Onetime street 1), Zipcode (34567), City/Town (Daisy-Town), E-mail (sam@hawkins.ww), and Phone number (03426377372252).
- CSA distribution location / Delivery address:** Includes a checkbox for "Use delivery address" (checked), and input fields for Street (Onetime street 1), Zipcode (34567), and City/Town (Daisy-Town).
- Bank Details:** A section header for entering bank information.
- #tags:** A section header for assigning customer groups.
- Shares:** A section header for managing share allocations.

 **IMPORTANT for CSA-Farmers:**

#Tag "CSA": If a customer is assigned to the tag "CSA", this customer is no longer selectable as a customer in the individual delivery. Delivery quantities can no more be assigned to him. Due to the #Tag, he belongs to the group "CSA", whose delivery quantity is determined automatically on basis of the current number of shares.

The option "Use delivery address" is not available for customers with the #Tag "CSA".

Customer file not mandatory! The member shares can be assigned to each CSA customer. However, the number of pickup members and share types can also be stored at created distribution locations.

Farm type "CSA" - shares: The number of harvest shares is required for the quantity calculation of the plants, bed meters and the harvest. If no shares are maintained, the crop planner issues a corresponding error message during set planning. Changes to the number of shares lead to a changed harvest and plant requirement (message & marking on sets)!



see points 5.3.2/5.3.3 Creating and assigning a distribution location and a customer group

 **Export members/customers**

Export of the customer file: To create an Excel export of the customer data click on the button.

5.3.2 Create pickup location

Distribution locations

The pick-up stations list shows all created delivery locations with their address and pick-up persons (number of members). In addition, the selected share types of the collectors are displayed in separate columns. A standard pick-up location is created by the program and cannot be deleted. Further pick-up locations can be created, as follows.

Name	S (As Of Today)	M (As Of Today)	L (As Of Today)	Total (As Of Today)	Number Of Shares	Street	Zipcode	City/town
Farmers Shop (Standard distribution location)	101	30	10	141	3	Sandyroad	27283	Crazytown
Hotel California	2	0	0	2	0	Maryroad 3	38373	Daisy Town

1 - 2 of 2 « ‹ › »

 **Create**

Create new pickup location: Open the sidebar, by clicking on "create" and click on the "pencil" symbol in the menu, to enter or change data. To edit created pickup locations, click on a pickup location entry in the list.

Pickup location address information: Enter name and address.

Contact person: Enter name and contact of a person responsible for the pickup location.

Details: Under Details, a security surcharge of the delivery quantities in % can be stored for the pick-up location. This will be taken over in every delivery by default.

Shares: Assign a specific number of shares to the pickup location in addition to, or if they are not to be assigned directly to the customer. Shares/subscriptions created at the pickup location can be deleted by clicking on the "trash can" button displayed on the right of each entry.

Create a new share entry: Set start and end kW/ and year and specify the number of harvest shares to be delivered to the collection station during this period. Assign a share type for each entry. Click on "create" below, to accept the entry. Create another entry with a new period to change the number of shares.

Manage share entries: Existing entries are displayed under the share investment field, by clicking on the "plus" to the left of the respective share type/subscription. By clicking on the entry, you can edit it, or delete it with the trash can icon.

⚠ Shares that have been assigned to the pickup location at the customer, cannot be deleted here and are marked with the "customer" icon. 👤 Navigate to the customer details to modify or delete them.

Shares

Start calendar week in year: 1 / 2022

End calendar week in year: 53 / 2023

Number of CSA shares: 1 Share type: S

[+ Create](#)

Share type	Start calendar week	End calendar week	Number of CSA shares
— S	1/2020	53/2022	100
	1/2021	53/2022	1
— M	3/2022	4/2023	30
— L	1/2022	53/2023	10

5.3.3 Create share types/subscriptions

Share types/subscriptions

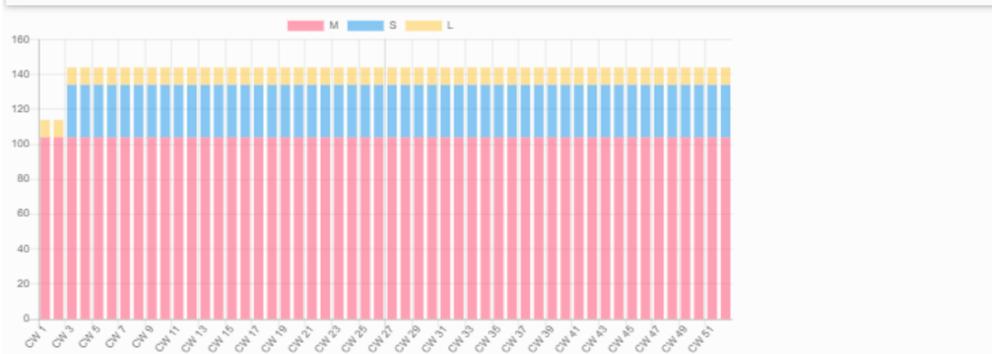
In this list you can create share types for CSA members or subscriptions for customers of your subscription box, i.e., different order options that members or customers can book in your offer.

+ Create

Create new share type: Click on "Create" to create a new entry. Each share type/subscription package is assigned a name and a value. "Value" is the share type calculation factor for the delivery quantity calculation of the individual crop/ware quantities for CSA or subscription box. With a **Value of 1** (predefined in the standard package), one portion of the "required quantity per share" (and unit piece or weight) maintained at the set, is packed per customer or member share from each harvested vegetable. For example, this would be 1 kg of tomatoes per M share (value =1) or 0.5 kg per half share (value = 0.5).

Name ↕	Value ↕	Currently Assigned Shares (As Of Today): ↕
S	0.5	30
M (Standard share option)	1	104
L	2	10

1 - 3 of 3 « < > »



Rounding for piece crops: Non-integer values cause the number of pieces to increase, as the required quantity is rounded up to the next higher integer. The program therefore rounds up half a cucumber to 1 cucumber, as piece goods are not usually delivered in half.

Example for a newly created share type would be package name "XL" or "Family share", with valence "3" (persons). In the same way, a package "Gastronomy" with valence "20" can be created if several seasonal restaurants are supplied.

The **list of share types** shows the share type name, the value, and to the right of it, the corresponding current number of customers or members assigned shares/subscription of each package.

Proportion type distribution in the current year: Below the table, the planned proportionate package distribution for each calendar week is displayed graphically. By clicking on the box above the graphic, you can show and hide the share types. Point with the mouse on one of the bars, to display the evaluation of the selected week. This makes it easy to track seasonal changes in the number of shares during the year.

5.4 Seed store

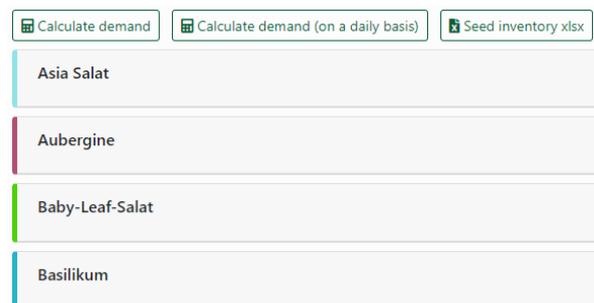


You can access the seed store via the "Data" button in the navigation bar. Here you can carry out seed inventory and order management, for quick calculation of the transplants and seed order-quantities.

Select the menu item "Seeds". A list of all crops and their varieties, created in the crop master data, appears.

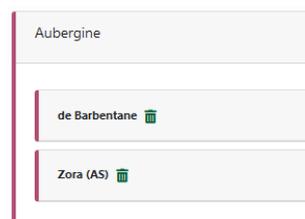


The buttons above the list can be used to **calculate** the requirement for seed quantities of all maintained crop varieties and to **export seed inventory**.



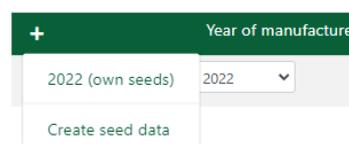
Click on a crop line to open or close the variety view. All varieties already created are listed (create new varieties in the crop master data).

You can edit individual variety entries, by clicking on a variety line in the detailed view. A table appears, in which the seed stocks can be managed. To delete the seed entry, use the "trash can" button.



5.4.1 Set up seed inventory

+ Create a new seed entry: Click on the "Plus" to the left of the green line next to the year of manufacture.



If variety data are already stored in the crop, they are displayed with the year for selection. For a new entry, select "**Create seed data**". Fill in the fields "Year of manufacture", "Manufacturer", "TKG" and "Stock". The number of grains is calculated from the TKG and stock information in the "Number of grains" column.

Complete seed entry: Click on the box under "completed" to hide the seed entry from the previous year or the current entry after the seed order has been completed. The entry will then no longer be included in future seed orders. To display all entries again, activate the "**Show all**" checkbox above the table.

Then close the variety detail view by clicking on the row with the crop name to save the entries. To delete the entry, click the trash can icon on the far right.

Take over seed data from the crop planning: By clicking on the "Plus" for a new seed entry, existing data, if available, will be offered in the menu, in the example above the seed entry eggplant - 2021 (own propagation). By selecting an entry, the variety data is imported from the master data of the crop.

 see point 2.3.3.3, Crops/varieties

5.4.2 Seed and transplants order

Create seed order: Once all varieties, required for the next season's crop, have been maintained in the seed store, the seed order can be calculated. A click on the button "Calculate demand" opens the order-list.

 **Transplants per box in case of additional purchase:** For the calculation of the transplants, the number of transplants per box must be maintained on the set for all crops purchased off farm!

Calculate demand by day: To create the list for transplants with ordering calendar weeks *and days*, use "Calculate Demand by Day" instead of "Calculate Demand".

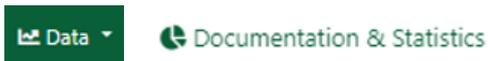


Export order-list: After reviewing, export the order to Excel by clicking the "Seed inventory xlsx" button.

Mark seed entries as completed: Open the seed entries of a variety in the variety list of the seed store. Activate the "done" box on the right of the seed entry. Now it is no longer displayed and not considered in the order calculation.

To show/hide completed entries, use "Show all" box on the left.

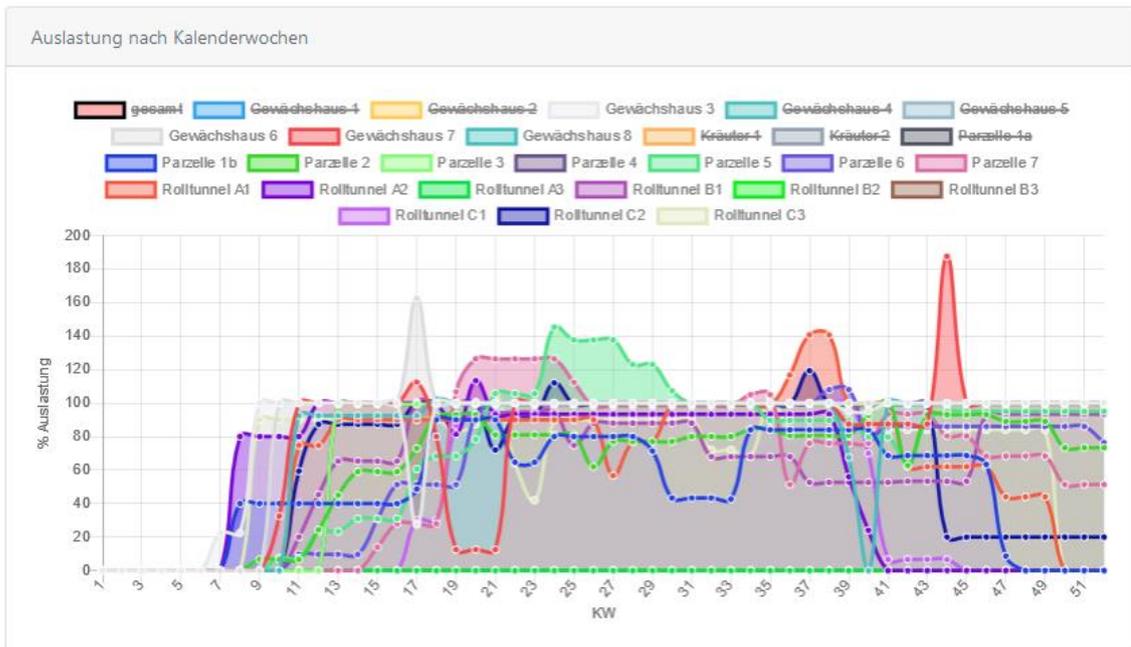
5.5 Documentation and Statistics



Here you can access the operational documentation and statistics. Under "Data" in the navigation bar click on "Documentation and Statistics". The farm statistics for fields and crops are displayed. It contains five areas (Fields, Crops, Yield, Nursery and Tasks).

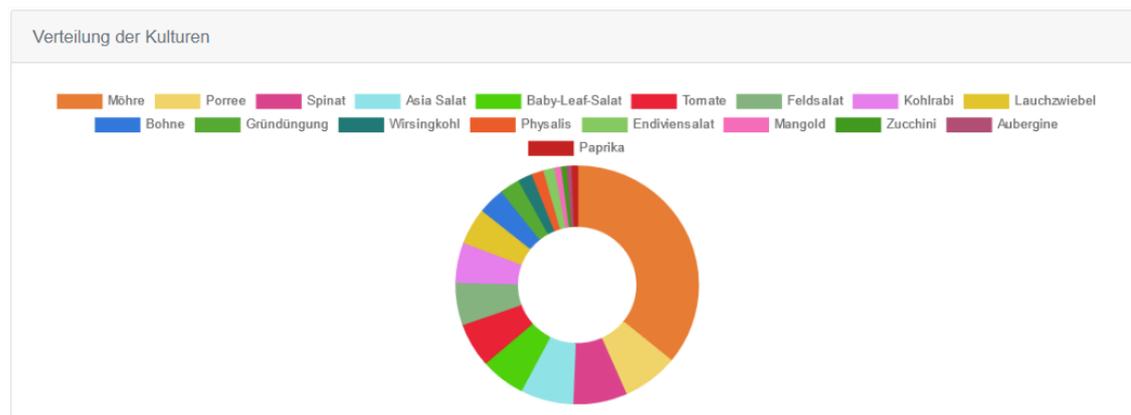
Fields **Fields statistics:** The table lists all fields with number of beds, area size and division, occupied bed metres and area as well as the resulting percentage utilisation. Values > 100% can be explained by multiple occupancy of crop sets with temporal overlap. In the bottom line of the table ("total"), the totals are displayed for all columns, except for the last column "utilisation". Here, the average of all utilization values is given.

The assignments of individual fields can be opened by clicking on the table row of the field. With a click on the field name, you get to the field view.



The chart below the table shows the percentage utilization of all fields over the year. Click on a rectangle in the legend above the chart to show or hide it.

Crops **Crop statistics:** The pie chart shows the percentage of bed meters of each crop to the total available bed meters of the farm.



The associated table shows the values of the crops on which the diagram is based. It shows the number of sets and their total bed metres and the proportional percentage bed metre requirement of the sets of the crop).

Yield

Yield statistics: This table shows the total harvest quantity in relation to bed metres and cultivated area. In addition to bed metre and area yields, the time of crop and average crop periods (crop, bed crop period, harvest) are given for each crop.

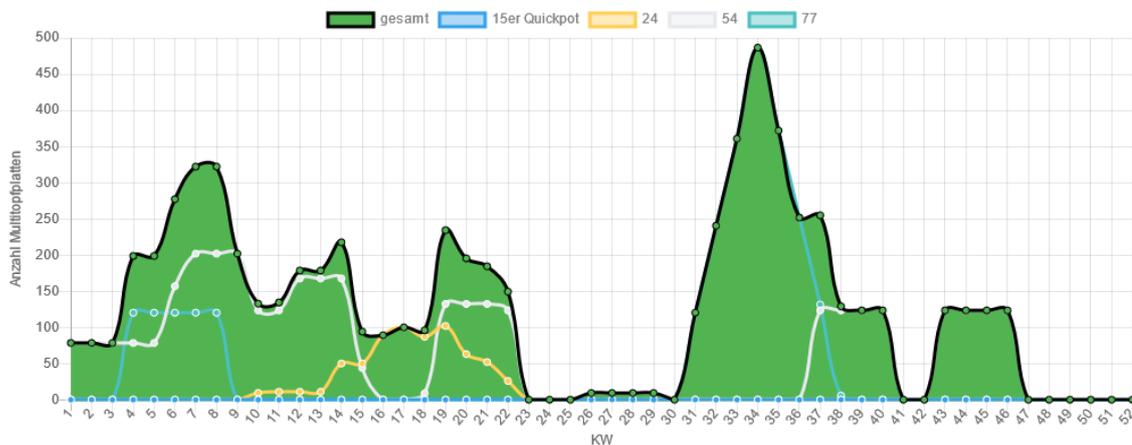
By clicking on the number of sets in brackets, a list of all sets planned for the respective crop in the crop year are expanded. Sets with missing data are displayed in red, as the statistical calculation cannot be performed here.

Nursery

Nursery statistics: In the nursery area statistics, the first column of the table shows the number of sets with nursery of the current year and the calendar week with the highest simultaneously existing number (amount) of sets. Column two shows the week with the highest number of multi-pot plates used and the week with the highest area use for nursery. In addition, here the volume of all multi-pot plates is calculated, and the substrate requirement needed for the entire nursery of the year is determined.

The upper diagram shows the space utilization for planted multi-pot plates or other growing containers over the entire growing year.

In the diagram below, the number of multi-pot plates required over the year is shown for each calendar week. This allows the plate requirement to be read off. Peaks in the planning can also be identified and reduced.



Tasks

Tasks statistics: The Tasks tab contains all the tasks stored in the system for the selected crop year, with the number of sets on which the task was stored and the total time required for the task. The tabs Crop, Sets, Fields list the tasks assigned to each of these. Tasks notes sets/fields shows all tasks with notes at a set/field. Tasks Notes without reference shows all tasks with notes that are not assigned to a set or field.

6 App information and help

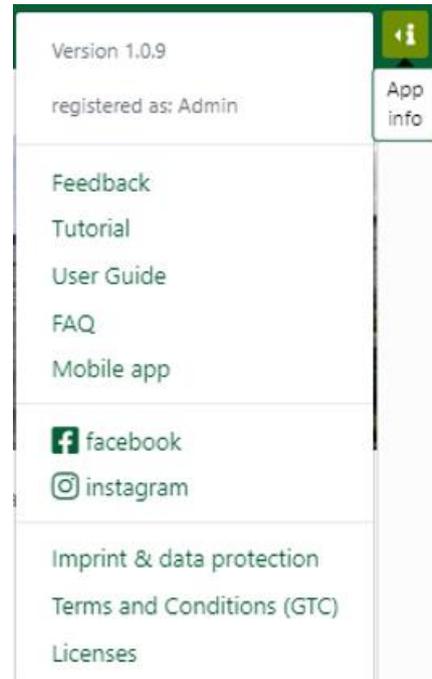
 Clicking on the "Info" icon in the navigation bar (top right) opens the Info menu with the following options:

Version: The top entry in the Info menu shows the current version number of the Micro Farm Planner.

Currently logged in user: If there is only the main user (admin), this is indicated here, with several created users, the logged in user's name is indicated.

Click on the following links to get more info:

- **Feedback form,**
- **video tutorials,**
- **manual,**
- **Frequently Asked Questions (FAQs).**

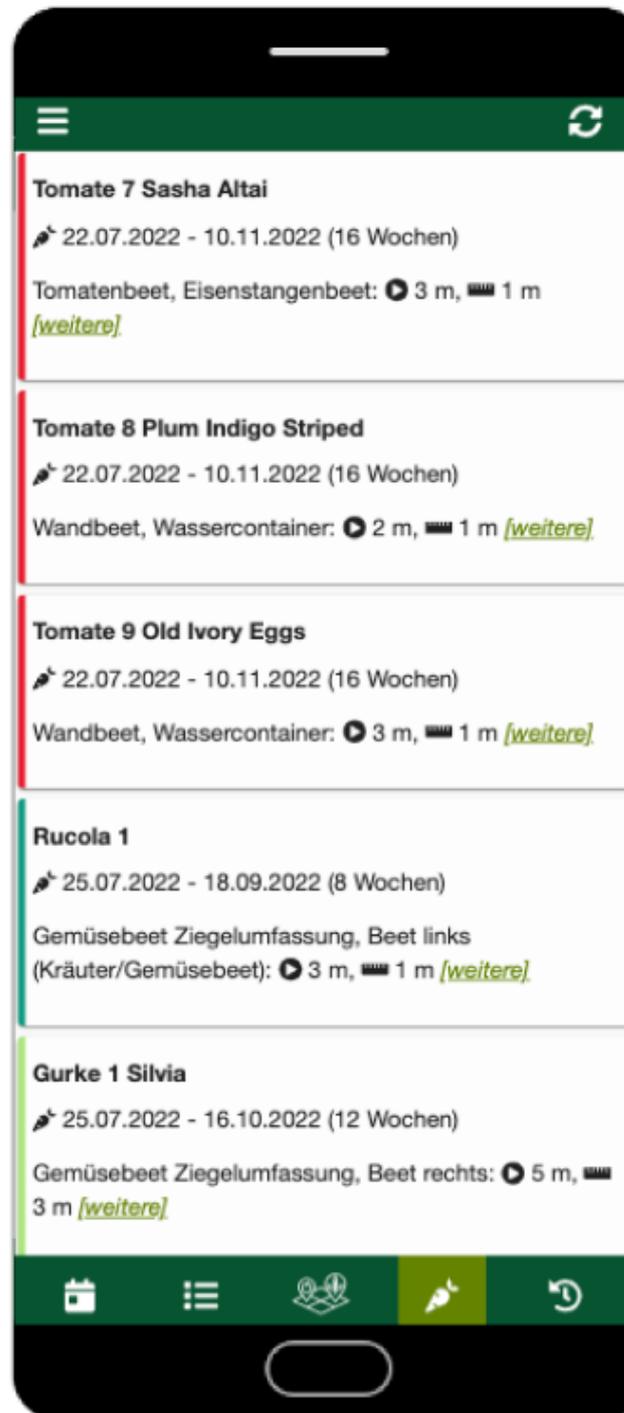


Mobile app login: Click on the "mobile app" link to access the smartphone app login in the browser.

Legal Information: In the lower part of the info menu, you will find the links to our legal information and conditions:

- **Imprint**
- **Privacy agreement**
- **General Terms and Conditions (GTC)**
- **and Licenses**

7 Smartphone App for the Micro Farm Planner



With the smartphone app, everyone in the team can use the task calendar. Get mobile access to the tasks in daily and weekly view and enjoy retrieving information about your activities on site, to set times and notes and to be able to complete tasks. You can also record the harvest amount directly in the field after the harvest.

7.1 Installation on Smartphone

Go to <https://mobile.micro-farm-planner.com> in your smartphone browser.

Android only: After logging in, you will be prompted to set up the app on your device via a pop-up window when opening it for the first time. To access the app from your home screen, confirm the request.

Did the automatic setup not work or was rejected? No problem, in every browser there is an easy way to install it manually. Depending on the browser used, the setup on the smartphone varies a bit - here's how to do it for Samsung/Google Chrome/Mozilla Firefox browsers, it will work similarly for others:

Samsung Internet browser: Select "Add page to" home screen from the settings menu.

Google Chrome browser: Select "Add to home screen" from the menu.

Mozilla Firefox browser: Select the house icon with the + and tap "add to home screen."

 **iPhone:** There is currently no setup option on the iPhone, as the Safari browser does not support. However, all described functions of the app can be used by calling up the link <https://mobile.micro-farm-planner.com>.

Voice input: To quickly make notes in the Micro Farm Planner App, you can use the voice input of your smartphone. If set up, it can be activated by the microphone icon (next to the keyboard) and you can speak the note. Select your preferred speech engine in the settings of your device under "Administration/Text to speech" or similar.

7.1.1 Status bar - connectivity and updatability

 **Up-to-datedness of the data:** The date and time of the last data update and the connection status with the connection symbol are displayed in the status bar at the top. When the device is connected, a wireless connection icon appears in **gray**.

 **Offline mode:** When the connection symbol is red, the device is offline, and no data can be retrieved from or transferred to the server. Data entered in the app in offline mode (e.g., tasks marked as completed, the time required for a task or recorded harvest quantities or notes) are only transferred, as soon as there is an internet connection.

 **Refresh/Sync:** While connected, tap the refresh button at the top right of the date display. This will transfer all data entered in the smartphone app to the desktop version. At the same time, all changes in the Micro Farm Planner are synchronized with the app.

7.1.2 Navigation and Options menu

The **navigation bar** at the bottom of the screen is used to select the different app areas. Tap one of the menu items to access the function (from left to right).

- Task calendar
- weekly task list
- mobile field view
- harvest registration
- time registration

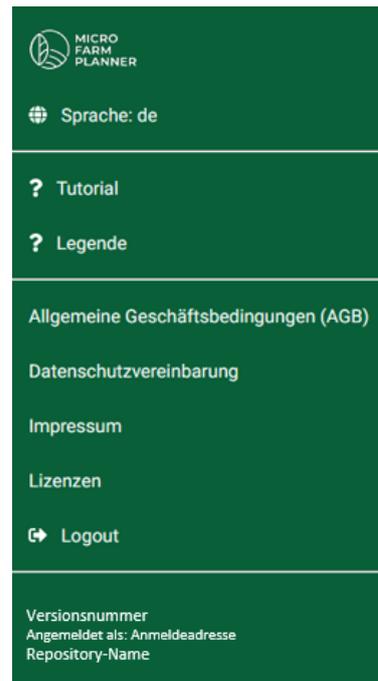


Tap the hamburger menu (top right) to view **options** and **information** about the app.

Language selection - tap to change the language.

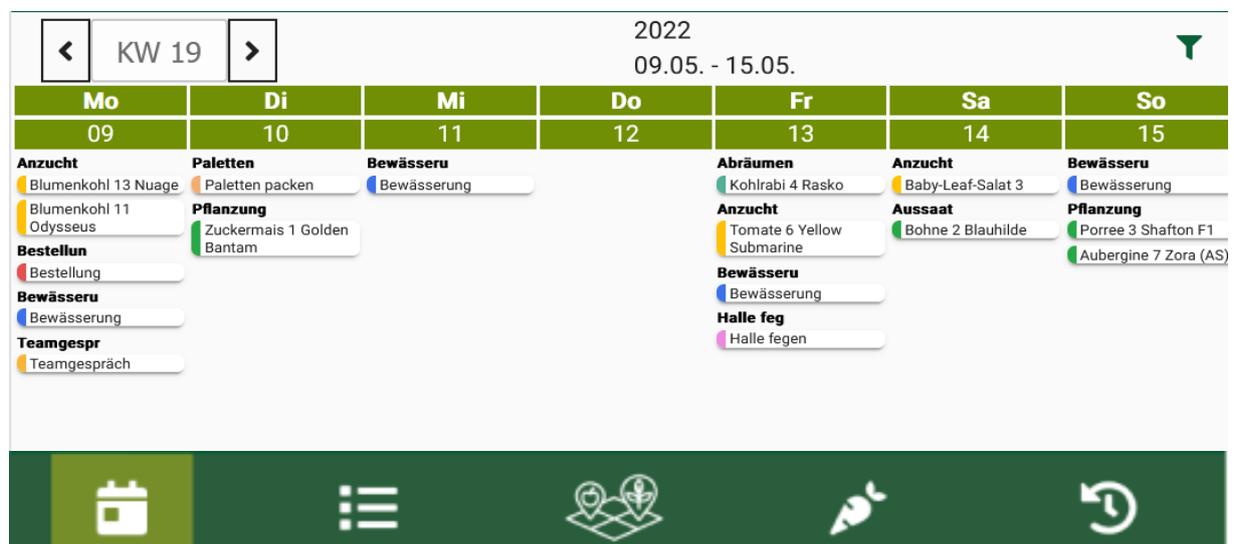
Under **Tutorial** you can open the explanatory videos for operating the crop planner and under **Legend** symbol explanations for the task detail view. **Legal information** on general terms and conditions, data protection, imprint and licences used can be accessed at the bottom of the menu..

You can log out of the app using the **logout button** at the bottom. Under the logout option, you will find the current **version number** of the programme, the registered email address and the name of the user environment (repository).



7.1.3 Task Calendar

The calendar shows the weekly overview with all upcoming tasks briefly.



Task-Week View:

 In the weekly view, task cards for the week selected, are displayed one below the other as a chronological list. The days of the week on which the tasks occur, are shown above the cards.

Each task card contains a detail overview with the task name as well as information about the set (if the task refers to a set, like in the picture).

 **Legend** A legend can be called up in the menu to display the described symbols on a mobile basis.

-  Edit note
-  Start position on bed
-  Bed meters
-  Number of plants
-  Number of multi-pot plates * Multipot size, Seeds per pot
-  Number of transplant flats * Plants per box when purchased off farm
-  25 * 35 (3 Reihen): Distance in the row * Row spacing (Number of rows)
-  harvest date (Harvest time)

Pflanzung

[Zuckermais 1 Golden Bantam](#)

 GrossAcker, 58:  421 m,  23 m

 280
 3.64 * 77 (1 Korn)
 23 m
 20 * 40 cm (2 Reihen)

 10.05.2022

 00:00 Arbeitsstunden 

erledigt

 The task time recording offers an hour and minute field for input. After work is done, the required working time can be entered in the corresponding task.

Tap the hourglass icon to enter times or revise an existing entry.

Work hours	Minutes
 0	0

With the plus sign, additional working hours can be added to the existing ones:

 **Mark task as completed:** To set the task to "Done", tap on the button with the same name. This removes the task from the list. In the task calendar of the desktop version, the task is displayed as completed after synchronization.

7.1.4 Field view

In the mobile field view you can filter by field and have the bed occupancy displayed graphically. Activate the zoom at the top right to zoom into the sets on the bed with two fingers and, for example, to better display mixed crops.



7.1.5 Harvest recording



Call up the harvest recording in the hamburger menu and a list of the sets in harvest period appears. After harvesting in the field, enter the harvest quantities at the corresponding sets. Use the plus button to add more sets to the current harvest recording.



The **harvest recording view** shows a list of the sets that are due to be harvested in the selected week. Tap on a set to go directly to the harvest recording.

The detailed view of the set opens with the entry. In the entries above, you can display the crop and cultivation information and the harvest data for the set.

Harvest recording of a crop:

To add a record to the set, tap on the input field, enter the harvest amount, and select the appropriate unit if necessary. Then tap on the "add" button, to save the entry.

The entry is also possible without a data connection, if the data has been synchronized on a daily basis (e.g., in the office in the

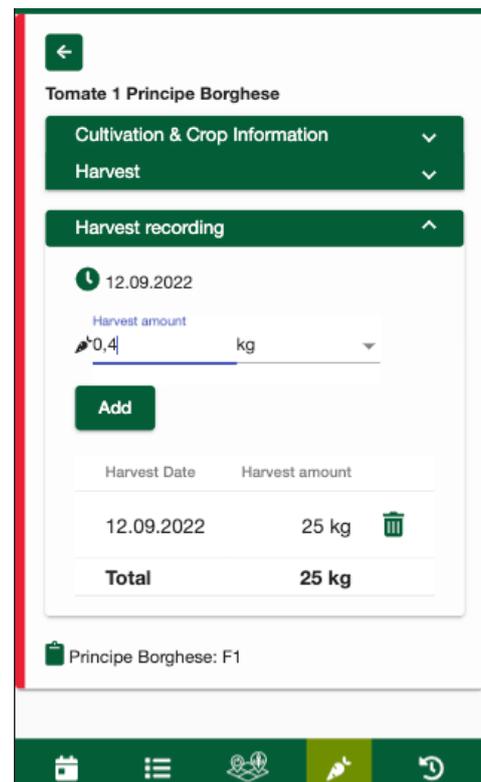


morning) and there is no logout from the mobile app afterwards.

In the bottom row below the harvest set you see the already recorded harvest quantities of the set and if there are more than one, a total is shown at the bottom.



Add notes related to the harvest in the input field below.



7.1.6 Time registration



Record working time in the mobile app:

Log in to the app and select the button for recording working time. The running timer is displayed on this button so that you always know how long you have been in the field.

Check-in

Tap on the "Check in" button to start the time recording. The start date and time as well as the working time already recorded are displayed.

Check-out

Tap on "Check out" before you start a break. After the break, tap "Check in" again.

8 Legal information

8.1 Imprint

Information according to §5 TMG

Rukola Soft UG (limited liability)

Schierkenring 14

38543 Hillerse

Phone: +495373 – 9219875

E-Mail: info@micro-farm-planner.com

Represented by:

Managing Director Yasmin Kemnitz

Managing Director Philip Kosanke

Sales tax ID:

Sales tax identification number according to §27a sales tax law: DE815843061

Commercial register:

Register court: Local court Hildesheim

Type of register: HRB

Register number: 206521

Image rights:

All rights of the images are owned by Rukola Soft UG (limited liability) and may only be used with prior permission.

Notice according to the Online Dispute Settlement Regulation

Under applicable law, we are obliged to inform consumers of the existence of the European Online Dispute Resolution Platform, which can be used to resolve disputes without having to go to court. The European Commission is responsible for setting up the platform. The European Online Dispute Resolution Platform can be found here: <http://ec.europa.eu/odr>.

Our email is: info@micro-farm-planner.com

However, we would like to point out, that we are not prepared to participate in the dispute resolution procedure, within the framework of the European Online Dispute Resolution Platform.

Please use our e-mail and telephone number above to contact us.

User manual
status 07.02.2023