



This is an accumulated description of changes made to GreenPlan recently, which are all contained in version 2022-1, March 2022.

The new functions and facilities are mostly developed on basis of wishes from current users.

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### Plant materials

The internal production and consumption of plant materials has been extended with a technique called “sliding balance”. This construct is a queue of plant materials where older material is used before newer materials. The technical term is a “FIFO” queue meaning a “First in, first out” queue. The queue is filled and emptied on a daily basis. On any single date it works like this:

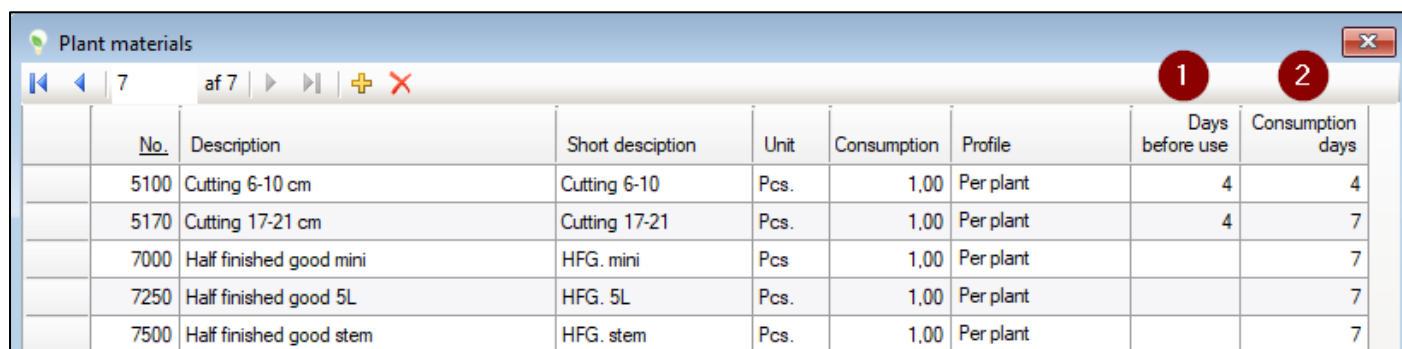
- First any plant materials still remaining in the queue but now being too old are dumped/wasted.
- Then all new contributions from producing crops are added.
- Finally, all consuming crops each claim a number of the plant materials in stock.

The details and the prerequisites for this are described in the below.

### Plant materials file

In the table, where plant materials are defined 2 new columns have been introduced:

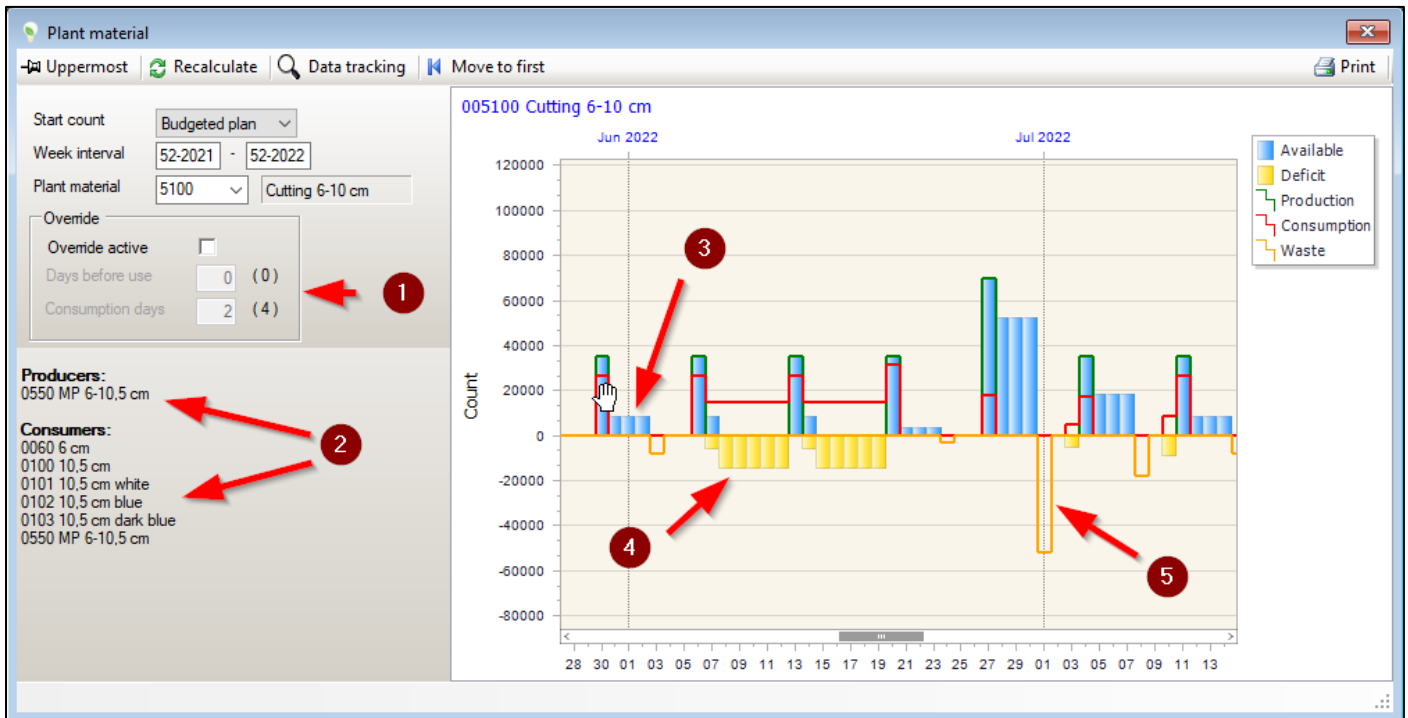
1. **Days before use.** In this field it is defined how many days after harvest that will pass before the plant material is ready for use. This delay may have several causes. Examples: Cuttings from pot roses may be shipped to an external contractor, where sorting and fine cutting is applied. Before the cuttings are back and ready for use in the production, several days may have passed. If the cuttings are e.g. from Kalanchoes, they are normally “put on hold” until the initial rooting has set in. The expected delay – in days - is entered in this field.
2. **Consumption days.** Normally a plant material has an “expiration date”. Except for maybe seeds, there is a limit for how long a plant material can be in stock before it must be used. If a plant material passes this limit, it is dumped/wasted.



No.	Description	Short description	Unit	Consumption	Profile	Days before use	Consumption days
5100	Cutting 6-10 cm	Cutting 6-10	Pcs.	1,00	Per plant	4	4
5170	Cutting 17-21 cm	Cutting 17-21	Pcs.	1,00	Per plant	4	7
7000	Half finished good mini	HFG. mini	Pcs.	1,00	Per plant		7
7250	Half finished good 5L	HFG. 5L	Pcs.	1,00	Per plant		7
7500	Half finished good stem	HFG. stem	Pcs.	1,00	Per plant		7

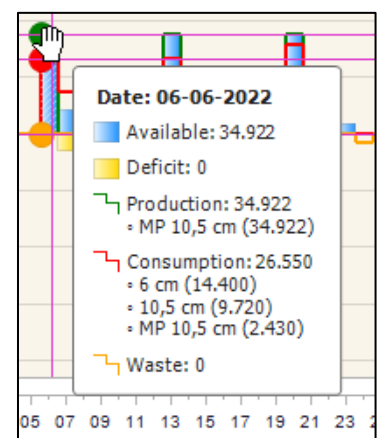
### Plant material, graphic

The graphics presentation is a simulation tool where the impact of the current plan and the settings in the Plant material file can be seen. The graphics is heavily loaded with data, and it may acquire a little effort to get familiar with it. The data in the below graphics are fictive and created so most aspects are available for explanation.



1. In the override box it is possible to simulate a different sliding balance by changing the “Days before use” and “consumption days” fields. Changes made here will have no impact on calculations elsewhere in the program.
2. For each plant material in the graphics, it is listed both which crops are contributing, and which crops are consuming.
3. The blue columns show the amount of plant materials available. In this example with only one contributor, it is easy to recognize the 4 days limit of possible use. The graphics show a consumption (red line) the very same day as the stock plants deliver a new batch of cuttings. Not all are consumed, and the remaining cuttings are available the next 3 days. On the fifth day the remains are dumped.
4. The yellow columns denote a production which cannot be satisfied by own production of plant materials. In this case the plant material must be purchased externally in order to fulfil the needs, or the stock plant/mother plant production should be modified.
5. The orange column denotes waste. In this example the number of cuttings is substantial, and a change of plan should be considered.

Use the “data tracking” tool to get the details of any day. Here it can be seen how much each producer is contributing and how much each consumer is using.





## Plant materials, reports

Several new reports have been introduced in order to get a proper overview of the internal production/consumption.

- **Plant materials, production.** This report shows exclusively how much plant material that is produced and by whom. The numbers have no link to any consumption.
- **Plant materials, consumption.** This report shows exclusively how much plant material that is needed and by whom, in order to start the planned production. The numbers have no link to any production.
- **Plant materials, account.** This report combines the 2 reports above and shows pretty much, what can be seen in the plant materials graphics. The numbers are accumulated due to the period indication selected. Deficits and surpluses may therefore be smoothed, if the report is made by week or by month.
- **Plant materials, list.** This report is a more detailed version of the above, where any figure relating to the internal production/consumption can be analysed.

Some of the columns are:

- **Own production.** Accumulated figure for all crops contributing.
- **Allocated.** Accumulated figure of what is actually consumed of the above. Typically, the consumption will follow close after the production.
- **Remains.** The difference between produced and the allocated.
- **Available.** Accumulated sum of own production of plant materials that has not been consumed or has expired due to age. This figure is the core figure in the "Sliding balance".
- **Total consumption.** The daily need of plant materials on basis of the starting quantities in the plan.
- **Internal consumption.** The number of plant materials that is covered by own production.
- **Plant purchase.** The number of plant materials that cannot be satisfied by internal production and therefore must be purchased externally.
- **Waste.** This figure describes the number of plants materials that have expired due to age. The figure shows on the date immediately following the last possible day of use.

	A	B	C	D	E	F	G	H	I	J	K
	Plant material	Description	Date	Own production	Allocated	Remains	Available	Total consumption	Internal consumption	Plant purchase	Waste
1	5.100	Cutting 6-10 cm	11-07-2022	34.922	26.550	8.372	34.922	26.550	26.550		
2	5.100	Cutting 6-10 cm	12-07-2022				8.372				
3	5.100	Cutting 6-10 cm	13-07-2022				8.372				
4	5.100	Cutting 6-10 cm	14-07-2022				8.372				
5	5.100	Cutting 6-10 cm	15-07-2022				8.372				
6	5.100	Cutting 6-10 cm	16-07-2022								-8.372
7	5.100	Cutting 6-10 cm	17-07-2022								
8	5.100	Cutting 6-10 cm	18-07-2022	34.922	26.550	8.372	34.922	26.550	26.550		
9	5.100	Cutting 6-10 cm	19-07-2022				8.372				
10	5.100	Cutting 6-10 cm	20-07-2022				8.372				
11	5.100	Cutting 6-10 cm	21-07-2022				8.372				
12	5.100	Cutting 6-10 cm	22-07-2022				8.372				
13	5.100	Cutting 6-10 cm	23-07-2022								-8.372
14	5.100	Cutting 6-10 cm	24-07-2022								



### Area costs

The table defining area costs has been moved from the overall "Nursery file" to "Facilities" where it has got its own entry. The costs are now defined in a period table as are the costs for materials, operations, etc.

No.	Description	Short desc.	Department # ref.
1	Fertilizer	Fertilizer	5
2	Rent	Rent	2

From week	To week	DKK/week-m²
01-2018	52-2021	5,000
01-2022	-	5,500

### Fixed costs

Fixed costs have been equipped with a period table thus introducing a third level in the "Locations and fixed costs" file. The costs table has a calculated column "Amount in period" in which the yearly cost is calculated as the actual amount in the period. The field can be edited, and the value entered will be calculated into the "Yearly cost" field.

No.	Description	Short desc.
1	Nursery	Nursery
2	Propagation	Prop.
3	Production	Prod.
4	Open field 1	Open field 1

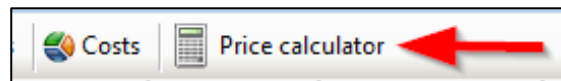
Date	Period start	Day	Period end	Week	Day	Yearly costs	Amount in period
04-01-2010	01-2010	Mon	31-12-2019	01-2020	Tue	120.000	1.199.671
01-01-2020	01-2020	Wed	31-12-2020	53-2020	Thu	120.000	120.329
01-01-2021	53-2020	Fri	31-12-2021	52-2021	Fri	120.000	120.000
01-01-2022	52-2021	Sat	31-12-2024	01-2025	Tue	120.000	360.329
01-01-2025	01-2025	Wed	-	-	Mon	120.000	



### Price calculator

It is now possible to call the "Price calculator" from within the planning file. Using this shortcut, the calculator will be initiated with the data from the current batch in the plan.

If the module "Plan Control" is installed, the plan-ID and current plan (Budget/Adjusted/Realized) is displayed in the calculator.



It is now also possible to keep additions if wanted. Check the field "Keep additions" and these will be preserved when resetting or a new batch is selected. Be aware, that only additions are kept. Any changes made to data originating from the recipe will be reset.

Material	Count	Status
2100 10.5cm 12h	758,160	Recipe
9000 Trolley1	27,077	Recipe
50000 Decoration	9.098,000	Added

Operation	Hours	Status
99 Pack	18,20	Recipe

### Customers

In the overall "Nursery file" a new tab containing a table with customers has been introduced.

It is possible to attach a customer to a planning line thus marking the production specific to a customer.

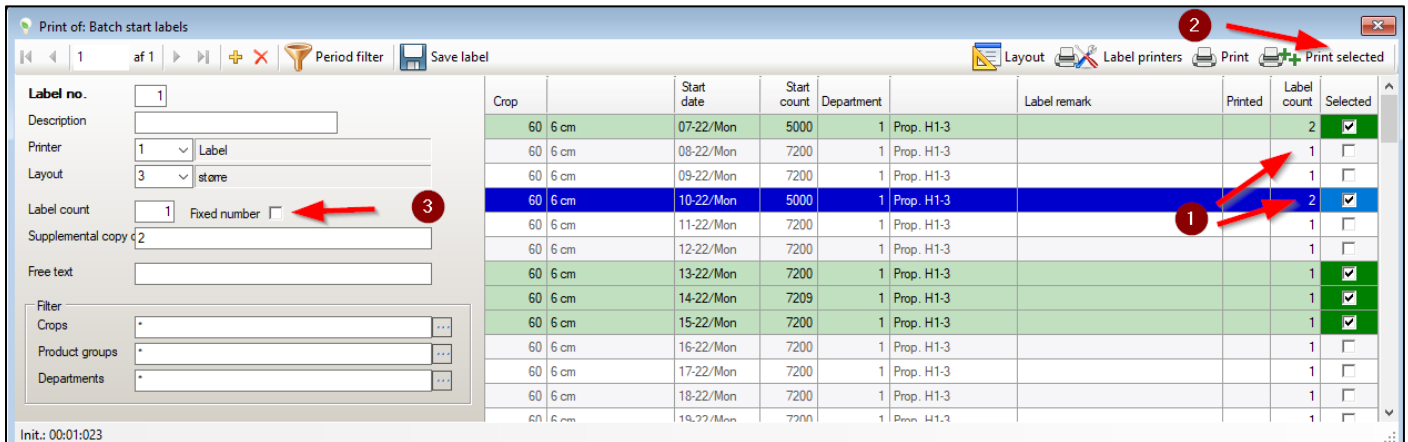
The customer column is by default hidden in the planning file, but it can be made visible using the function "Hide columns".

The use of customers is in the current version the most rudimentary possible. In the report "Sales overview" you can select a set of customers thus delimiting the report to these.

No.	Description	Short description
10	Customer AAAA	Cust AAAA
20	Customer BBBB	Cust BBBB
30	Customer XXXX	Cust XXXX
40	Customer YYYY	Cust YYYY
50	HortiAdvice	HortiAdvic



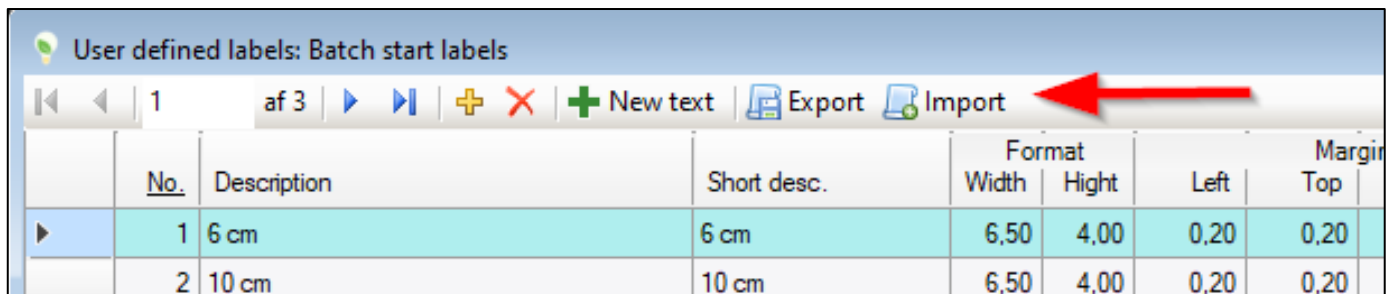
### Labels



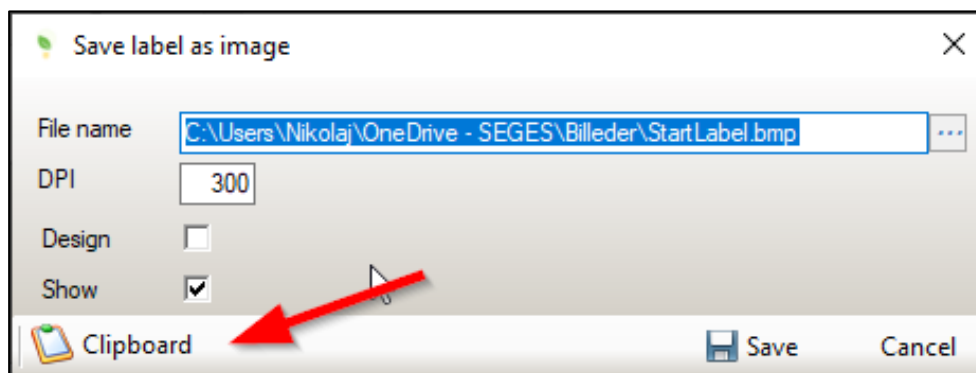
The function for printing labels has been extended.

1. The number of containers/tables are now precalculated. The number can be overridden if a different number is wanted. The override is lost when the window is closed.
2. Multiple lines can be selected for printing simultaneously.
3. It is now possible to make the number of labels printed fixed regardless of the number displayed in the table.

Label layouts can now be exported and imported in xml format.



In the "Save label" function it is now possible to copy the image to the clipboard for use elsewhere.







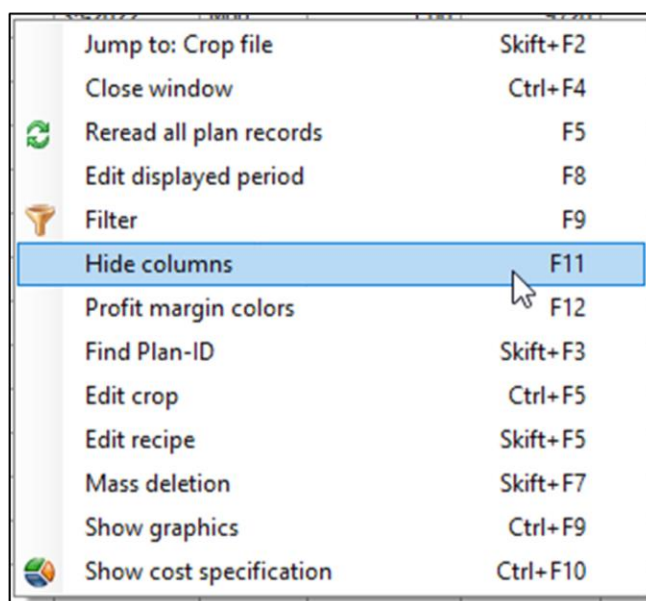
## Calculated tables, Economy and production

The calculated table for exporting data to other systems have been extended with several fields.

- **Economy.** The fields “Recipe no” and an extra external reference and “customer no” have been added.
- **Production.** The fields “Recipe no” and an extra external reference have been added.

## Columns in planning file

New optional columns in the planning file are now by default hidden. The shortcut [F11] shows the function for customizing the form.z



## Other things

Throughout the program minor changes have been applied and known bugs have been fixed.